



LAHDEN AMMATTIKORKEAKOULU
Lahti University of Applied Sciences

UNDERSTANDING CONSUMER PURCHASE AND SELECTION OF ORGANIC FOODS

Case: K-citymarket Oy Lahti Paavola

LAHTI UNIVERSITY OF APPLIED
SCIENCES

Degree Programme in International
Business

Bachelor's Thesis

Spring 2014

Nguyen, Tran Bich Ngoc

Lahti University of Applied Sciences
Degree Programme in International Business

NGUYEN, TRAN BICH NGOC

Understanding Consumer Purchase and
Selection of Organic Foods

Case: K-citymarket Oy Lahti Paavola

Bachelor's Thesis in International Business, 82 pages, 8 pages of appendices

Spring 2014

ABSTRACT

Consumers' growing concern over food safety has intensified the demand for healthy foods worldwide. Personal benefits are merging with society sustainability, as conscientious consumers are increasingly choosing ethical food products. Within that context, organic foods fully meet the diverse demand. Consumers, however, are selecting organic foods based on a complex set of factors that are not easily interpreted.

This study aims to assist the case company in discovering consumer purchase criteria for organic foods. The results are expected to not only support the case company in establishing proper marketing strategies but also provide other concerned parties with insights into consumer selection of organic foods.

The research undertakes the combination of qualitative and quantitative method, of which the latter is prevailing. Qualitative method is conducted by face-to-face interviews with the K-citymarket representative, in combination with open-ended questions in the survey. Quantitative method employs web-based and paper questionnaires. The issues raised in the questions are compiled based on the findings from previous studies. The survey, occurring for 2 weeks in K-citymarket delivered 613 responses.

By using statistical analysis, a specific segment of organic consumer is identified; including consumers aged above 51, and are either female or retirees. When considering buying organic foods, the health benefit is the utmost importance, followed by, in order, ethical concerns, trust, price and sensory attributes. From 15 initial criteria, four underlying factors are fortunately detected and statistically confirmed to contribute to the prediction of organic food purchase frequency.

The findings are reliable and valuable for formulating marketing strategies. Marketing managers may be confident to highlight the personal and society benefits in combination with promoting domestic organic products in order to directly affect consumer decisions on organic food purchases. More detailed information on the premium quality of organic foods should be widely available to appeal to new consumers and retain existing ones.

Key words: organic foods, consumer purchase criteria, food choices, the concern for health, survey, questionnaire, K-citymarket, SPSS.

ACKNOWLEDGEMENT

The completion of this thesis could not have been possible without the wholehearted support of the following people. Above all, I am deeply grateful to my thesis supervisor, Mrs. Marja Viljanen, who gave me invaluable comments and warm encouragement that kept me going. I would like to thank Mrs. Liisa Laiho and Mr. Miika Kuusisto for their suggestions on my thesis. I am grateful to receive the generous comments on my questionnaire from Mr. Riku Nummikoski and the approval for my statistical results from Mr. Markku Järvinen.

I must also thank Mr. Marko Laaksonen, Managing Director of K-citymarket Oy Lahti Paavola, for his meticulous preparation for the implementation of the survey.

My heartfelt appreciation goes to Niilo Oksanen, who participated in translating the questionnaire with great interest and enthusiasm. I feel so lucky to have him as a kind and lovable accompany.

I owe my deepest gratitude to my beloved parents and my sister, who always support, encourage and believe in me. I wish to thank my love, Trinh Khoa, who kept a sense of humour when I had lost mine.

Last, but by no means least, I sincerely thank my friends in Finland, in Germany and in Vietnam for their encouragement throughout.

CONTENTS

1	INTRODUCTION	1
1.1	Background	1
1.2	Thesis objectives and research questions	3
1.3	Research methodology	4
1.4	Thesis scope and limitation	7
1.5	Thesis structure	9
2	ORGANIC FARMING AND ORGANIC FOODS	11
2.1	Organic farming development and its core value	11
2.2	Organic food overview	16
2.2.1	Concept and label	16
2.2.2	Production and consumption in the European and Finnish market	18
2.3	Case company: K-citymarket Oy Lahti Paavola	21
2.3.1	Operation	22
2.3.2	Organic product range	23
3	DETERMINANTS OF ORGANIC FOOD PURCHASE	27
3.1	Motives	27
3.1.1	Concern for health	27
3.1.2	Sensory appeal	29
3.1.3	Ethical concerns	31
3.1.4	Social influence	32
3.2	Obstacles	35
3.2.1	Price	35
3.2.2	Perceived value	36
3.2.3	Availability	38
3.3	Consumer characteristics	40
3.4	Shepherd food choice model	41
4	QUESTIONNAIRE DESIGN PROCESS	44
4.1	Pre-construction	45
4.2	Construction	47
4.3	Post-construction	51
5	EMPIRICAL RESEARCH	53
5.1	Data acquisition process	53

5.2	Data analysis	54
5.2.1	Classification information	55
5.2.2	Basic information	60
6	DISCUSSION AND CONCLUSION	73
6.1	Findings	73
6.2	Further research	79
6.3	Evaluation	80
7	SUMMARY	82
	REFERENCES	83
	APPENDICES	91

LIST OF FIGURES

FIGURE 1. Research Methodology.....	7
FIGURE 2 .Thesis structure	10
FIGURE 3. The growth of the organic agricultural land between 1999 and 2009 (The World of Organic Agriculture 2011).....	13
FIGURE 4. Organic food labels in Europe and in the USA (European Commission 2013; USDA 2012).....	18
FIGURE 5. The Finnish organic food label (Heinonen 2009)	21
FIGURE 6. Market shares of K-Group in grocery industry (Kesko Food Trade 2012).....	22
FIGURE 7. Pirkka organic food products (Modified from Pirkka 2013).....	24
FIGURE 8. The K-citymarket specialized in health food department	25
FIGURE 9. The top reasons for the UK consumers to buy organic foods (Soil Association, 2012)	34
FIGURE 10. Shepherd food choice model (Modified from Shepherd, 1985).....	42
FIGURE 11. Questionnaire design process (Modified from Naval 2011, 72)	45
FIGURE 12. Likert scale response	48
FIGURE 13. Data acquisition process.....	53
FIGURE 14. Age distribution of the respondents	56
FIGURE 15. Demographic data of the respondents	56
FIGURE 16. Respondent employment status and organic food purchasing	62
FIGURE 17. Responses regarding obstacles to organic food purchases.....	71
FIGURE 18. Four predictors of organic food purchase frequency	77

LIST OF TABLES

TABLE 1. Respondent monthly income in Euro (include subsidies)	57
TABLE 2. The frequency of organic food purchases.....	58
TABLE 3. Shopping channels for organic foods.....	59
TABLE 4. Types of purchased organic foods	59
TABLE 5. General attitudes towards organic foods between two groups	61
TABLE 6. The relationship between age and the purchase of organic foods	63
TABLE 7. Mean scores of the criteria for organic food products	65
TABLE 8. KMO and Barlett's Test for Factor analysis	68
TABLE 9. Simplification of the purchase criteria for organic foods	68
TABLE 10. The predictive factors of organic food purchase frequency	70

LIST OF ABBREVIATIONS AND DEFINITION

GMOs	Genetically Modified Organisms
p. value	Indicator of significance value in SPSS. $p < 0.05$ shows significant results $p > 0.05$ shows insignificant results

1 INTRODUCTION

1.1 Background

Since the mid-1990s, soaring demand for organic foods worldwide has elevated a niche market into a mainstream of food choices. The World of Organic Agriculture (2013) figures the 170-per cent expansion of organic food market globally since 2002. In Australia, the estimated value of organic production has surged 16 per cent annually since 2009, says the Australian Organic Market Report (Monk et al. 2012, 8). This consumption phenomenon has spread across continents at speed. Among European Union member states, the UK and Germany are the organic market leaders in terms of market size. Particularly, the UK consumers demand had resulted in the tenfold growth in sales of organically produced foods during just over 10 years from 1994 to 2004 (Soil Association 2004). In Scandinavian countries, The Nielsen Company detects the healthy growth in the Finnish organic market, at about 20 per cent in 2008 (Organic World 2009).

As demand is outpacing production, a great deal of conventional producers have responded with the transition from traditional farming to organic farming. In the U.S, the proportion of organic farmland increased stably at an average annual growth of 19 per cent from 2000 to 2005, reported by Dimitri and Oberholtzer (2009, 10). Organic farming has strongly attracted producers and consequently, been considered as “one of the hottest Megatrends in U.S agribusiness” (Ellsworth 2001, according to Ingersoll 1997, 1). Whether the degree of growth varies in countries and regions, the statistics prove that organic food consumption is on the rise.

It has not been long since the growth appeared to level off. The “Many faces of organic study” (The Hartman Group 2008) showed that organic food consumers are seemingly holding back from organic foods. Specifically, the share of the U.S consumers buying organic dropped slightly, four percentage points, during 2006-2008. In the UK organic market, the signal of saturation has appeared as the growth rate has decelerated to below 10 per cent (Padel & Foster 2005, according to MINTEL 2003, 607). Although the decline in organic food consumption was

not statistically significant, organic food suppliers have been intrigued to elicit factors that refrain their organic customers from continued buying.

In this context, countless researchers have thoroughly investigated what has driven this outpouring of organic food demand and supply, on the other hand, what could scale down the prospective growth recently. Food safety concern is claimed to be the strongest motivation for organic buyers (Paul & Rana 2012, 412-422). The healthy eating trend has infected shoppers worldwide and altered their purchasing habits. Customers are more and more perceptive, discerning what they shop for and making decisions based on their awareness of health and environment. As time has proved, their penchants for sustainable living induce a relentless organic food consumption that has been witnessed.

Nonetheless, it appears that the sagging economy has caused increasing price sensitiveness. As it is a fact that a vast majority of consumers regard organic foods as high-cost choices (Whole Foods Market 2005), cutting down on purchasing is a countermeasure for living on a reduced budget. Financial constraint, however, might not be the only barrier but other elements are being accused of the downturn in demand as well. Rooting out the causes for the discrepancy in consumer preferences and behaviors has become a necessity.

According to Global Agricultural Information Network report, organic foods account for only 1.2% of the Finnish food market, which is relatively low compared to that of other neighboring markets such as Sweden 3% and Denmark 7% (Dahlbacka 2011,2). Given this context, the author is urged to research on the determinants of organic food consumption. Encouraged by teachers' suggestion and guidance, this thesis is conducted, targeting K-citymarket Oy Lahti Paavola, an organic food supplier. Like other contemporary providers facing with the downturn mentioned above, a K-citymarket representative cites that the case company has been questioning the relatively low consumption of certain organic products (Laaksonen 2013). The thesis will elaborate upon two main motivations. Firstly, for the sake of K-citymarket, the author aimed at filtering the most influential determinants on consumer selection of organic foods. The inquisitiveness from the commissioner and the author in discovering customer perception of organic products is the second motivation.

1.2 Thesis objectives and research questions

The principal objective of this thesis is to assist the case company, K-citymarket Oy, in discovering consumer purchase criteria for organic foods. During the empirical research and statistical analysis, the criteria could be eventually revealed. Further, previous studies on consumer purchase of organic foods supplement and verify the findings. The information compiled in this study is expected to be a supportive and informative resource not only for the case company but also for other concerned parties in the organic food market.

According to K-citymarket, the purchase frequency of certain organic foods has not risen as expected (Laaksonen 2013). Actually, only a handful of particular organic food products have been consumed frequently, namely organic vegetables and fruits or organic bread as well as olive oil. These unexplained facts are striking signs to the case company of the complicated consumer selection of organic foods. They are wondering if customers are making food choices based on some lurking benchmarks, corresponding to their desires and needs.

The research problem is converted into an explicit research question. Generating a concrete research question helps guiding inquiries and defines the whole data collection process. The primary research question is straightforwardly postulated: “What are consumer purchase criteria for organic foods?”

Five sub-questions are compiled in order to achieve the desirable answers.

1. How have organic farming and organic foods prevailed recently?
2. Why are consumers buying organic foods? What induces them to buy?
3. On the other hand, what could hinder customers from purchasing organic foods?
4. What is the relationship between consumer demographic characteristics and their purchasing patterns towards organic foods?
5. What are consumer criteria for selection of organic foods? Among them, what determinants matter most?

1.3 Research methodology

Research design

An appropriate research approach lights up the path to the required achievement. It bonds literature sources and empirical study together. In addition, research design demonstrates how the research is undertaken systematically, i.e., based on logical relationship rather than self-belief (Saunders et al. 2012, 5).

In this research, deductive approach is applied. The direction of reasoning flows from general to specific. In this case, observations of a real problem, stagnant growth of organic food turnover, lead to a necessity for testing against the ground factors of consumer purchase decisions. Findings for a concrete case company are formulated on the basis of theory. It is noteworthy that deductive reasoning cannot be employed without previous research knowledge available for the phenomenon. (Kananen 2001, 40.) After immersing in abundance of preceding studies, the author completely ensures that the chosen research approach is feasible and justified.

Contemplating the research design with regards to research questions, the author was intentionally involved in descriptive research. Descriptive research directs the researcher towards an explicit and accurate profile of events or situations (Saunders et al. 2012, 171). As an ambiguous picture of the phenomenon in mind might deviate the data collection process, describing the organic food situation and portraying organic food consumers sufficiently are particularly an essential grounding in this case.

The purpose of a study determines its research method. In order to assist the case company in comprehending customer requirements, this thesis investigates two studied objects simultaneously. The first and foremost is K-citymarket Oy Lahti Paavola, the commissioner. Their expectations for the findings are the premise for the research questions. Second is the K-citymarket customer. The thesis probes their purchase criteria for organic foods, thus, the K-citymarket customers are definitely the fundamental objects.

Consequently, the author decided to conduct both qualitative and quantitative research to figure out the purchase criteria for organic foods, corresponding to the case company's inquiries.

Research methods

This research undertakes the combination of two research methods.

A literal distinction between qualitative and quantitative method lies in the substance of their names. "Quantitative" answers quantitative questions and is concerned with numeric data. Meanwhile, "Qualitative" grasps the abstract data that is non-numeric. Concerning the manipulation of data collection, the difference between two methods is clearly exposed. Qualitative method refers to data collection technique such as interview of the studied object for exploring unknown facts. Meanwhile, quantitative method utilizes data collection technique such as questionnaires. Statistical data is obtained in return through quantitative method. (Saunders et al. 2012,161.)

The qualitative method aims at exploring commissioner's requirements for the outcomes. Two interviews with one of the K-citymarket representatives were intentionally scheduled in the beginning phase. The research scope was gradually scaled down and more explicit with further interviews.

If qualitative method is necessary, quantitative method will sufficiently contribute to the research techniques. Quantitative method enables large coverage of customer inputs by utilizing surveys, allowing easy comparison in a highly time-efficient way (Saunders et al. 2012,177). Besides that, many variances in purchase criteria need to be included in data analysis. In optimizing the number of data gathering, quantitative method absolutely prevails against qualitative one.

Both research methods have been utilized exclusively and extensively for scientific studies. Saunders et al.(2012,161) state that the combination of them had become even more common in respond to the increasing complication of today research matters. Furthermore, they are confirmed to supplement each other (Gorard & Taylor 2004, 3).

Due to the complexity and ambiguity of consumer selections of organic foods, a few follow-up open-ended questions are placed among other close-ended ones. This type of questionnaire design encourages respondents to express their own opinions and decisions. It offers the possibility to explore the aspects that previous literature has neither been covered nor attained. Thus, combination of qualitative and quantitative methodologies was applied within the same questionnaire. To sum up, a mixed research method will be utmost reliable and suitable for this context.

Data collection

Selected research methods define the subsequent research activities. As stated above, this research follows a deductive reasoning. Saunders et al. (2012, 177) claim that the survey strategy is commonly associated with deductive approach. Accordingly, data is obtained from primary sources through survey and interviews.

Since customers purchasing K-citymarket products are the studied objects, a web-based self-completion survey was sent to them via email, accompanied with a description of the survey purpose, a survey instruction as well as incentives for stimulating participation. One of the K-citymarket Oy Paavola representatives, Mr. Laaksonen (2013), confirms that K-citymarket Oy is entitled to obtain permission marketing with its customers, who registered to update K-citymarket product and service information, meaning that emails are not unsolicited and probably are sent to the intended receivers. A service company managing the list of customer contacts embedded with K-plussa cards is assigned to send the email survey. For the purpose of optimizing response rates, the author supplements email survey with an identical paper survey distributed in K-citymarket.

In this research, secondary data is particularly essential and influential. Rigorous literature review is collated from published journal articles, formal studies, books as well as electronic sources on organic food consumers and related issues. On the one hand, past literature is expected to provide the case company and other concerned parties insights into their organic customers, as comprehending customer demand is a key success factor. On the other hand, the empirical part

then is compared and contrasted with the preceding research in order to verify the reliability of research methodology.

The collected data extracted from web-based and paper survey will be thoroughly analyzed by exciting Statistical Package for the Social Sciences (SPSS) version 20.0.

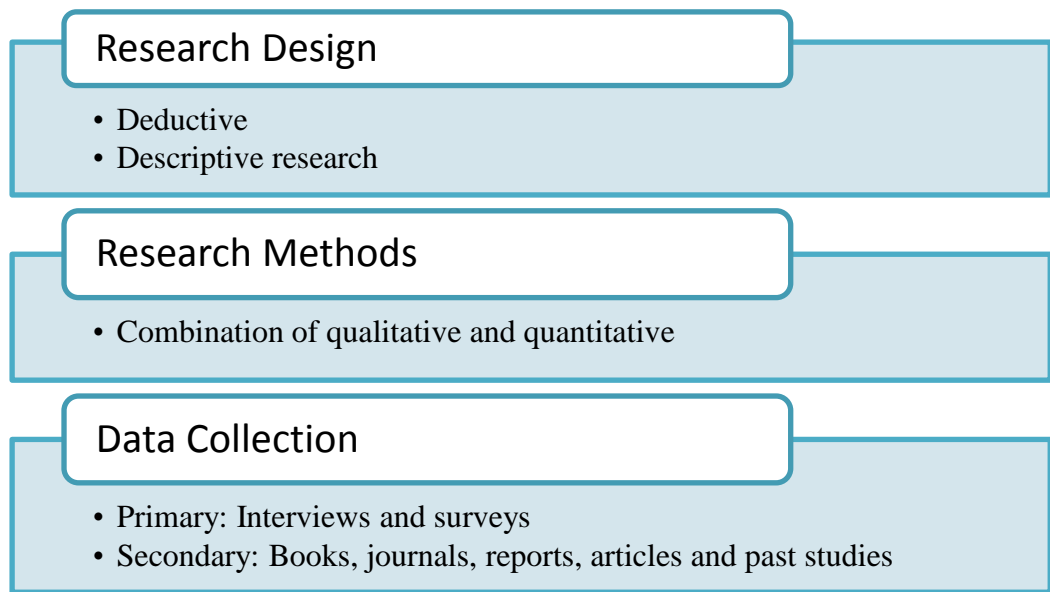


FIGURE 1. Research Methodology

1.4 Thesis scope and limitation

As titled, this research aims to investigate consumer purchase of organic foods and contributes to K-citymarket Oy Lahti Paavola. The empirical part manipulates data originating from K-citymarket customers, which form a narrow group. A sample certainly does not present the whole population. The sample size should be extended to a larger number, allowing the optimum result. The results are inevitably affected by demographic and cultural factors. Hence, the generalizability only reaches to the environment surrounding the research, which is K-citymarket in Lahti city, Finland. Regarding the concentration of this thesis, consumer criteria for organic food purchase is distinctly examined. Other aspects

such as motivations for buying are not intensively covered. Instead, secondary sources are reviewed to supplement the findings.

Customer demand patterns, in fact, are not always the same and even subject to new emerging consumption trends. With the time constraint, data collection takes place only during 2 weeks in the middle of November 2013. Therefore, it might become obsolete information over time. The case company is suggested to conduct confirmatory research in order to meet the changing needs of tomorrow's consumers.

Dealing with language barrier is inevitable in the questionnaire design process. The translation of the English questionnaire into a Finnish version attempts to avoid misleading and retain the original meaning. Fortunately, the author received valuable support and comments from the thesis supervisor, the Finnish language teacher and especially helpful friends and librarians. The questionnaire feedbacks from non-experts of business such as friends and random Finnish people are relevant as the intended respondents are K-citymarket customers. Undoubtedly, transparency and comprehensibility of the questionnaire drive the quality of responses, influencing data analysis in the empirical section. Thus, the translation process is worth great efforts and attention.

For the web survey, an evident drawback is that the intended respondents are merely Internet users. A part of the target population might be neither skilled in computer techniques nor have Internet access. In order to surmount this disadvantage, the author decided to utilize a laptop for implementing the web-based questionnaire in K-citymarket. In favor of elderly people who are not likely to use computers, identical paper questionnaires are provided simultaneously as a contingency approach. The paper self-completion questionnaire, however, is accompanied with a need for data entry into SPSS program. The procedure might require time, heavy effort as well as meticulousness for accuracy, not to mention the results depend fully on willingness of the respondents (Ghauri & Grønhaug 2010, 100).

1.5 Thesis structure

The research is structured in two main sections: review on past studies and empirical implementation of the survey.

The introductory chapter, Chapter 1, briefly introduces the economic and social significance of the organic food trend, and then raises the research problem need to be addressed. Chapter 2 provides an overview of the organic market and depicts organic farming history, core value, and organic-food related issues. The current situations of organic foods in prominent markets are also described in general.

Chapter 3 explores the determinants of the purchase of organic foods. It further profiles organic food consumers and details the patterns of consuming organic foods: triggers to initial purchase, motives for continued purchase, and impediments to organic food purchases. Literature review on consumer behavior towards organic foods from various markets brings up multi-sided aspects, thus, supports the study.

Chapter 4 expounds the questionnaire design process including its objectives, structures and benchmarks that drive the data collection. Without any doubts, constructing a questionnaire is significantly important in this research, as the empirical part will subsequently deploy the obtained data.

Chapter 5 deliveries the questionnaire results and conducts an in-depth analysis. Up to this chapter, the answers to the research questions will be systematically revealed during executing SPSS analysis techniques.

Chapter 6 elaborates upon the research findings, conducts an objective assessment and suggests further research. Chapter 7, eventually, encapsulates the main ideas and the research process.

Figure 2 below demonstrates the breakdown of this thesis in a nutshell.

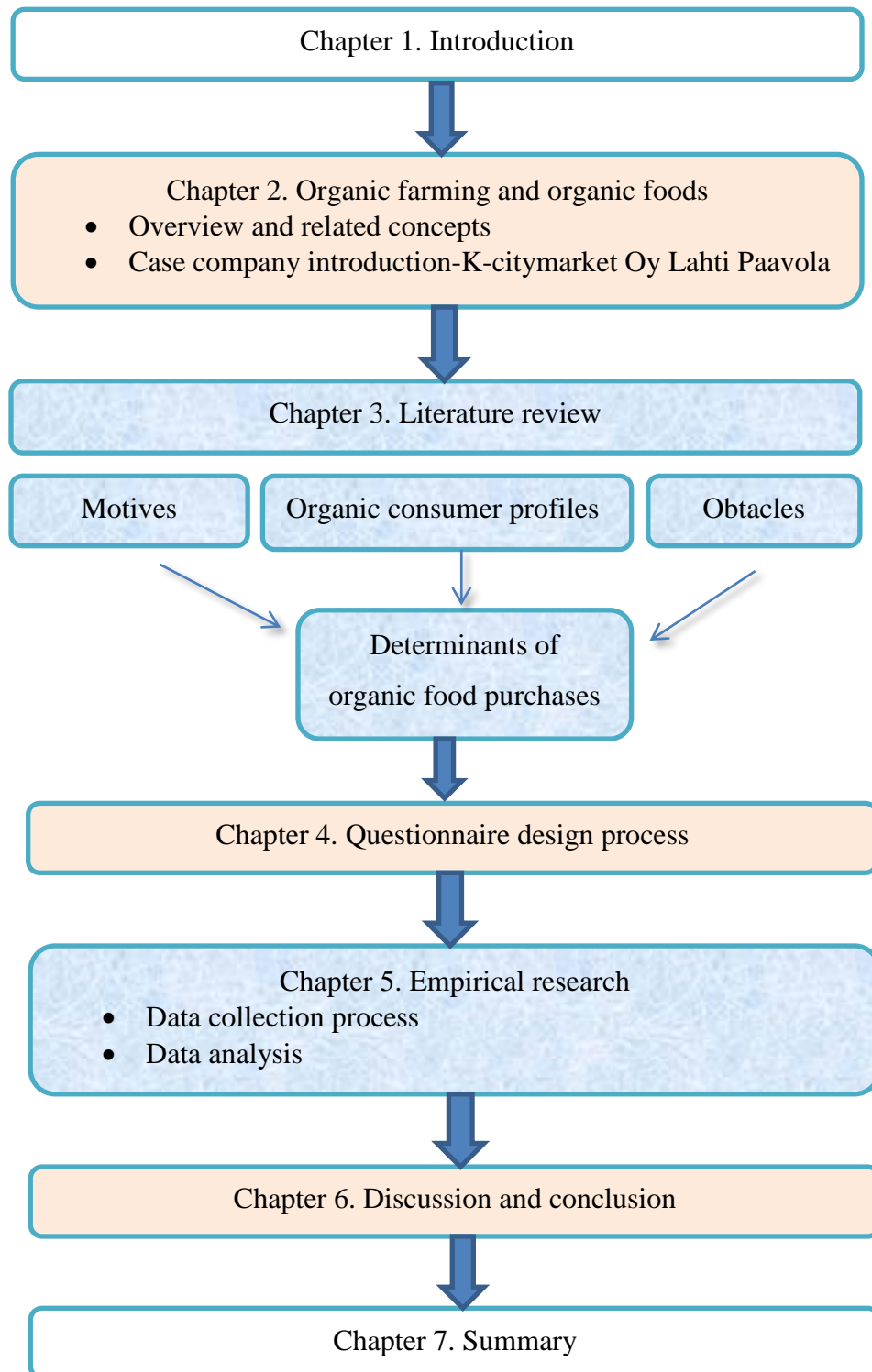


FIGURE 2 .Thesis structure

2 ORGANIC FARMING AND ORGANIC FOODS

In this thesis, non-organic farming methods are considered as conventional farming methods. Correspondingly, foods not organically grown are called inorganic or conventional foods.

Over the past decades, scientific advancements, on the one hand, have yielded a high level of agricultural productivity. On the other hand, the intensive application of technical advancements has caused problems for millions of farmers in traditional farming. Recently, traditional farming has been scientifically criticized for the overexploitation of soil, the abundant but low-nutrition products and the deterioration of social life in rural areas (Vogt 2007, 9). Fortunately, organic farming has been introduced as a convincing solution with its valuable and eminent attributes, thus, it is worthwhile to perceive the concepts related to organic farming and organic foods exhaustively. This chapter encompasses the historical development of organic farming and its core value. In addition, the following sub-chapters reveal the situations of organic food consumption and production in the European and Finnish market in order to comprehend the economic and socio-cultural significance of organic farming.

2.1 Organic farming development and its core value

In the beginning, agriculture relied heavily on labor input and nature. Hence, food production was periodically in supply shortage and left behind by the fast-expanding population. Taking advantage of scientific advancements, conventional farming has gained considerable quantities in production. This progress in food production, however, tends to align with advanced technological rather than nature-based application. In other words, farmers are increasingly establishing larger farms, exploiting sophisticated machines and putting chemical substances in manufacturing process. Conventional farming encourages them to apply synthetic pesticides on controlling pests and insects (Duram 2005, 8). Synthetic pesticides are capable of killing a wide variety of pest species; however, they simultaneously wipe out other predators and parasitic species, which are not the

intended targets. Besides, the soil easily absorbs the residual chemicals, which contaminate the groundwater. This pesticide-based approach is embedded with many unwanted consequences such as ecological imbalance, residues on products, detrimental effects on farm workers and consumer health. (Horne & Page 2008,3.)

Owing to the imminent threats of conventional farming, it was imperative to conceive an alternative. Then, an abstract idea of a farming method named organic was nominated. In fact, the concept of organic farming did not originate from scientists but from farmers and advocates for sustainable agriculture (Johannsen et al. 2005, 10). Later, the scientific theory of organic farming was first proposed during the 1920s and 1930s. It was not until the 1970s, the theory-based organic farming became a successful and prominent system in the world of agriculture. (Vogt 2007, 9.)

It is a fact that the unfulfilled demand has been the leading factor of the organic food growth (Latacz-Lohmann & Foster 1997, 275-282). The existing supply capability of organic foods failed to cover the strong demand in terms of product availability and variety. As a result, the conversion from conventional farming to organic farming has been relentlessly occurring worldwide.

Figure 3 presents the remarkable growth of organic land in 10 years, from 1999 to 2009, reports by The World of Organic Agriculture (2011).

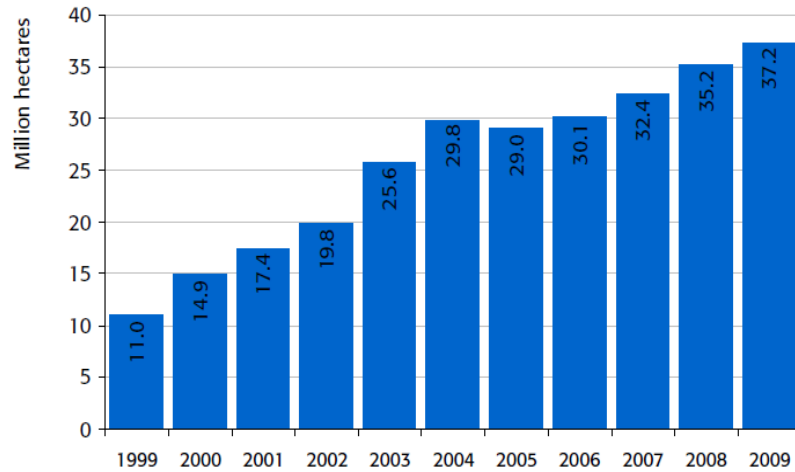


FIGURE 3. The growth of the organic agricultural land between 1999 and 2009 (The World of Organic Agriculture 2011).

In the early stage of organic farming development, only 11 million hectares of agriculture land were organic all over the world. Then, as soon as organic foods expose its value to consumers effectively, demand fueled supply. Consequently, agriculture land witnessed the double-digit expansion of organic land each year; and until 2004, the area of organic agriculture land reached almost 30 million hectares. In a very short time, the “organic phenomenon” demonstrates its utmost significance with a threefold increase in organic area. The growth continued to rise in the next following year and until 2009, approximately 37 million hectares of agriculture land had been converted to organic land.

The organically managed agricultural land has increased in all regions; however, a large majority of land is still inorganic. In North America, where the biggest organic market locates, only about 18.3 per cent of land was converted to organic. Over years, Europe has had a stable growth of organic agriculture land, yet the organic land constitutes 2.2 per cent of land area. (The World of Organic Agriculture 2011.)

From the producer perspective, it is worthwhile to have a holistic picture of organic farming in order to consider a prospective farming method. From the

consumer perspective, the adequate knowledge of the manifold value of organic farming probably declares a justification for organic food purchases. Therefore, organic farming concept, objectives and core value are straight presented.

Briefly described, organic farming prohibits the applications of genetically modified organisms (GMOs) and restricts conventional inputs such as chemical additives, pesticides, antibiotics, synthetic fertilizers and so on. Instead, organic farming practices nature-based approaches that employ organic animal feed, organic fertilizers, or beneficial insects in order to control harmful pests. (European Commission 2013.)

Covering a wider scope, organic farming aims to enhance ecological harmony by connecting and optimizing the productivity of soil life, plants, animals and people simultaneously. Promoting sustainability of living system is the primary principle of organic farming, in contrast to the quantitative principle of conventional farming (Kristiansen et al. 2006, 223).

In 2005, International Federation of Organic Agriculture Movements, the world largest non-governmental organization for the organic agriculture movement, compiled four principles of organic agriculture. These principles not only guide the application of organic farming but also reflect organic farming value in interactions with the surrounding components. The principles of organic agriculture comprise the principle of health, the principle of ecology, the principle of fairness and the principle of care.

First and foremost, the principle of health aims to retain and improve the health of all involved objects in the production, namely soil, plants, animal and human. As these objects are interrelated, human and animal health is directly associated with the health of the ecosystems, which include soil and plants. The principle defines health as the enhancement of physical, mental, social and ecological attributes in a long term rather than only the short-term eradication of illness. (IFOAM 2005.) One illustration of this principle of health is the renunciation of external inputs. By not using chemical additives and fertilizers in production, organic farming would minimize the risks of soil contamination, lower the level of pesticide residues on consumer products and decrease farmer health effects (Duram 2005,4).

As a result, the health of soil, plants, farmers and consumers is highly protected and enhanced.

Secondly, the principle of ecology sustains a harmonized and closed system based on the ecological processes and recycling. Designing such a universal system compels the coordination among several parties ranging from producers, distributors, sellers to the end consumers. In order to optimize nourishment and well-being, the production environments are supposed to be entirely ecological. Meanwhile, materials and energy supplies are reduced by reuse and recycling. Ecological balance is sufficiently attained by consumer effort to protect the environment. (IFOAM 2005.) Adherence to this principle, organic farming improves environmental quality, prevents soil erosion and conserves natural resources through an ecological system (Duram 2005, 41).

Thirdly, the principle of fairness ensures the equal rights and responsibilities of all involved parties including farmers, distributors, consumers, in addition to animals and future generations. Organic farming strives to produce an adequate supply of foods and facilitate the reduction of poverty in low-developed regions. As organic farming method excludes the expensive external inputs, farmers in developing countries would take advantage of their favorable conditions for organic agriculture. In those countries, the existing conditions comprise of abundant natural resources, low-cost workforce as well as long-standing farming experience and skills. Organic farming also creates supportive conditions for animals, responding to their natural behavior and well-being. For the sake of future generations, organic farming conserves natural and environment resources to the most feasible extent. Overall, the benefits and demand of each party are assuredly fulfilled. (IFOAM 2005.)

The forth principle, the principle of care, expresses the continuous precaution and responsibilities for practicing organic farming. Due to the fact that organic agriculture is a living and changing system, the application of organic farming requests iterative reviews from scientists. Scientific examinations of existing methods are conducted rigorously and periodically to ensure health, security and ecology of organic farming. Furthermore, new technologies are highly encouraged to promote advancements in organic farming. However, risks of adopting new

technologies must be avoided in the course of proper assessments and testing. The principle of care selects appropriate technologies in compliance with values and demands of farmers, workers or any affected parties. An efficient and stringent management of organic farming is indispensable to the well-being of organic farming, contemporary and future generations. (IFOAM 2005.)

Those four principles of health, ecology, fairness and care provide an in-depth understanding of organic farming objectives, core value, and benefits; and further nurture the sustainability of agriculture development.

2.2 Organic food overview

This sub-chapter provides the detailed information on organic foods regarding the regulations of the organic label, the production and consumption of organic products in the European and Finnish market.

2.2.1 Concept and label

Following the core principles regarding health, ecology, fairness and care, organic farming produces organic foods that incorporate valuable attributes, which are healthy, nutritious, safe and free from GMOs. Especially, organic foods are ethical and moral since organic farming promotes fairness, animal well-being, environment conservation as well as prevents the disturbance of ecosystems.

Organic food products comprise a wide variety of fresh and processed food products. Among them, organic fruits and vegetables are the most common. The popularity of other organic products varies from countries to countries. Overall, scientists and farmers attempt to diversify organic food variables to fulfill consumer diverse demand. (Food Marketing Institute 2008, according to The Hartman Group 2008, 3.)

Recently, natural foods, “whole foods” or “green foods”, which are so-called sustainable foods, are confused with organic foods. It is noteworthy that organic and other natural foods are not identical in terms of the processing method. Natural foods include any food products that are little or are not processed. The nutrient content and ingredients of those natural foods, however, are not yet explicit. Apart from natural meat and poultry, the process of natural food products is not stringently regulated by the government. Meanwhile, organic farming completely adheres to crucial principles in the production as indicated in sub-chapter 2.1. The term “organic” is strictly regulated by authorities at both national and regional level. It can be said that natural food concept encompasses organic foods, however, all natural foods are not assuredly to be organic. (Food Marketing Institute 2008,1.)

With regards to the legal aspect, the United States Department of Agriculture (USDA) regulated the national standards for commercial products attached with organic labels. In the USA, the world’s biggest organic market, the implementation of the USDA organic seal for organic has been one of the national standards. The organic label aims to ensure quality integrity and eliminate consumer confusion over organic labels. (USDA 2012.)

In Europe, the European Commission first introduced a certified logo for organic products at the end of the 1900s. The application of this logo in the European countries was voluntary. In 2007, in order to foster organic farming development, the European Commission officially launched the EU organic leaf logo, which replaces the pre-existing one. The timescale for the transition from the old to the new organic logo was two years. In 2010, the European Commission decided to make the new logo mandatory for pre-packaged organic food products. Meanwhile, the new organic leaf logo is still optional for non pre-packaged and imported products. Other private, regional or national labels are still allowed to be displayed alongside the EU leaf organic logo on the product packages. (European Commission 2013.)

Figure 4 below shows the EU leaf organic logo and the USDA organic seal respectively.



The EU organic leaf logo



USDA organic label.

FIGURE 4. Organic food labels in Europe and in the USA (European Commission 2013; USDA 2012)

The EU leaf logo was selected by the majority of EU citizens in a design competition. The organic products attached with the EU leaf logo indicate to consumers that the products are in conformity with the European organic standards. The new logo is expected to appeal to consumers and credit organic products with more of authentic quality. (European Commission 2013.)

2.2.2 Production and consumption in the European and Finnish market

According to The World of Organic Agriculture (2011), Europe is the second biggest market for organic foods and drinks. From 2010 to 2011, the sales of organic foods and drinks in the European market increased 9 per cent and totally amounted to nearly half of the global sales.

The largest market for organic food products is Germany, followed by France and the UK. Recently, the prolonged economic downturn has imposed many negative effects and scaled back organic food consumption in the big markets, for instance in Germany and in the UK. Meanwhile, in other markets such as Sweden and France, organic foods strongly attract consumers to its superior characteristics,

resulting in the double-digit growth of sales in 2009. (The World of Organic Agriculture 2011.)

In the Southern Europe, consumers show little interested in organic foods, as they only spend a minor share of food expenditure on organic products. However, several Southern European countries such as Portugal, Greece and Spain are significantly export-gearred and providing an enormous amount of organic food products to other markets, mostly to northern European countries. Likewise, Central and Eastern European (CEE) countries have started to focus on organic food production, but aim for the export purpose rather than the supply to domestic markets. The internal organic markets in this region are starting to grow and CEE citizens are highly prospective consumers of organic foods. Among those countries, Poland, Czech Republic, and Hungary are the prominent markets. (The World of Organic Agriculture 2011.)

The Northern European countries are not big organic food producers like the Southern cousins. However, Scandinavian citizens are the strongest buyers of organic foods, along with Alpine consumers. In the Swiss and Austrian market, the sales of organic food and drink products account for over 5 per cent market share. Similarly, each Danish consumers spends about 202 US dollar for organic foods, the highest amount in the world. (The World of Organic Agriculture 2011.)

In Finland, the severe weather condition appears to play a supportive role in growing organic foods. The cold becomes natural pesticides as pests and insects are rarely alive under very low temperatures. Located in the world northernmost area, Finnish fields are suitable for the growth of plants, which are rich vitamin C such as wild berries (Heinonen 2009). Within that context, organic production is growing stably but still at the early stage. Until 2013, the Finnish government attempts to support farmers in the transition to organic farming, resulting in 8% of farms and 8.7% of the Finnish areas are certified organic. The Northern Ostrobothnia is the largest organic area, followed by Uusimaa and Pirkanmaa. In the northern Finland, Lapland is recognized as the world's largest area for organic wild foods. (Pro Luomu Ry 2013.)

Finnish organic food products range from grains, vegetables, dairy products to meat. According to MTT Economic Research (2013), the Finnish organic market is progressively developing in terms of production volume and area. Compared to 2010, the production of organic milk and eggs increases at speed in 2013, which are 20% and 45% respectively. (Niemi 2013, 30-34.) The high rate of milk production might derive from the Finnish culture of consuming lots of milk products. With regards to area, carrot, garden pea and onion are grown in the largest farming area (Koivisto 2013, 35-39). Since 2008, organic foods have been risingly becoming attractive to Finnish consumers, resulting in an increase from 17% to 22% of Finnish buying organic foods regularly (Dahlbacka 2011).

Especially in Finland, the catering industry favors organic foods in professional and public caterings. Organic foods are penetrating into the kitchens of several day care centers and elderly people houses, in which 10% and 2% of food products used are organic respectively. Further, a recent survey reveals that 13% of the Finnish municipalities agree to increase the share of organic food products in public catering. (Pro Luomu Ry 2013.) Reported by Global Agricultural Information Network, “Step to Organic” is a supportive program for expanding the use of organic food products in Finnish professional kitchens. In 2010, over 500 kitchens, which mostly belong to public sector, had undertaken the program. In those kitchens, at least one organic product is permanently used in accordance with the program regulations. (Dahlbacka 2011.)

Regarding the certification program, the Finnish Food Safety Authority Evira is responsible for the inspection system, which investigates and verifies the eligibility of organic producers. Qualified producers are allowed to attach their organic products with the state label Luomu granted by Evira. (Heinonen 2009.)



FIGURE 5. The Finnish organic food label (Heinonen 2009)

With regards to shopping channels, about 84% of organic food products are distributed through retail channels. The rest are sold in other channels such as open markets, speciality stores or direct sales and many more. (Dahlbacka 2011.)

Retail channels are the most dominant distribution channels, as reported above. In the retail industry, a prominent and long-established food supplier is K-food store that corporates closely with the case company K-citymarket. The following sub-chapter provides an overview of K-food stores, K-citymarket and organic-food related information.

2.3 Case company: K-citymarket Oy Lahti Paavola

The studied objects of this thesis comprise K-citymarket Oy requirements and the K-citymarket customers. Therefore, a brief overview of the case company and its operation, in addition to the organic product range are necessary. Concerned with the research problem, the situation of organic food sales in K-citymarket is also presented.

2.3.1 Operation

K-citymarket Oy Lahti Paavola is one of numerous K-citymarkets belongs to Kesko Food. Kesko Food is one of Kesko Corporation divisions. Kesko Corporation is a leading Finnish conglomerate operating in retail industry. (Kesko Food Trade 2013.)

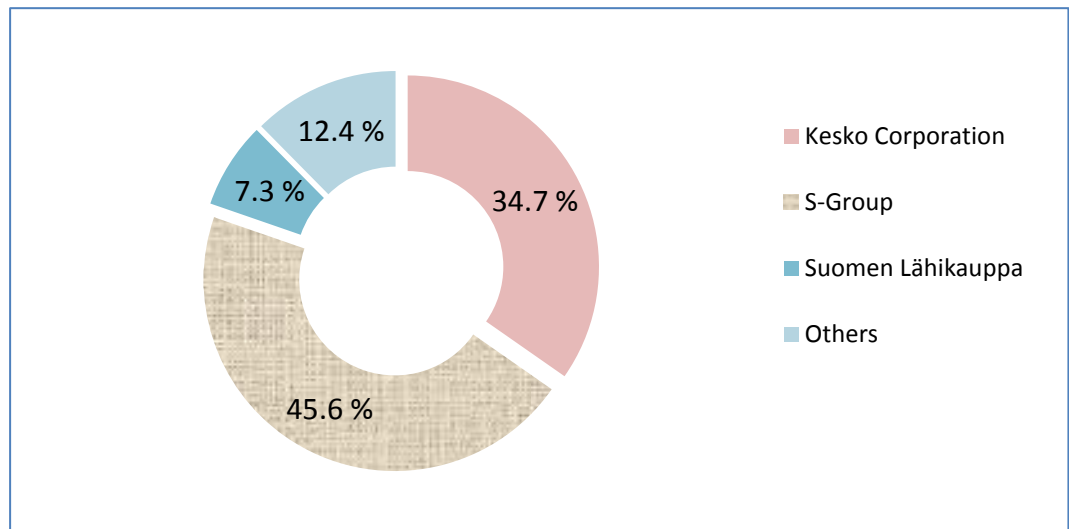


FIGURE 6. Market shares of K-Group in grocery industry (Kesko Food Trade 2012)

The pie chart in Figure 6 shows that Kesko Corporation along with S-Group dominate over 80% of the grocery market in Finland. The prevailing presence of Kesko Corporation attracts over 900,000 daily customers to K-food stores. Kesko Food is rather the supply side, which is responsible for procurement, selection management, logistics, the development of chain concepts and the network of store sites. Kesko Food cooperates with K-food stores, which focus on the consumer side. K-food stores include four chains, namely K-citymarket, K-supermarket, K-market and K-extra. K-food stores utilize the K-plussa loyalty cards in order to track customer fast-changing needs timely. Taking advantage of the K-plussa bonus cards, K-food stores are able to offer relevant product ranges,

conduct efficient marketing channels and establish a store network that satisfies their customers. (Kesko Food Trade 2013.)

Over 900 K-food stores are operating in Finland, the home market. With a great ambition, Kesko food trade division has expanded to Russia, another neighboring market. (Kesko Food Trade 2013.)

2.3.2 Organic product range

K-citymarket Oy Lahti Paavola offers a wide variety of food products, in which Pirkka is K-food store private label. According to Kesko Annual Report (2012), until the end of 2012, K-food stores have already provided customers with over 2,200 Pirkka products including organic, fair trade and local products. Driven by consumer fast-changing demand, K-food stores are widening the Pirkka core product range; as a result, over 100 additional Pirkka products are launched every year.

Every year, the Kesko Food Product Research Laboratory assesses approximately 10,000 product samples, ensuring that Pirkka products are always of high quality. According to several consumer surveys, Pirkka has the best image among Finnish consumers. Pirkka products are certainly K-food stores competitive advantages over their rivals in the fierce grocery market. (Kesko Annual Report 2012.)

Recently, K-food stores have recognized consumer strong demand for organic products. Correspondingly, K-food stores attempt to stock organic products and distributes through K-food chains at pace. They also aimed to double the number of Pirkka organic products in response to consumer diverse demand. During the year 2013, the number of Pirkka organic products takes off from 50 and accumulates to 99, says by Kesko annual report (2012).

Figure 7 below introduces some of numerous Pirkka organic food products ranging from fresh to processed products.

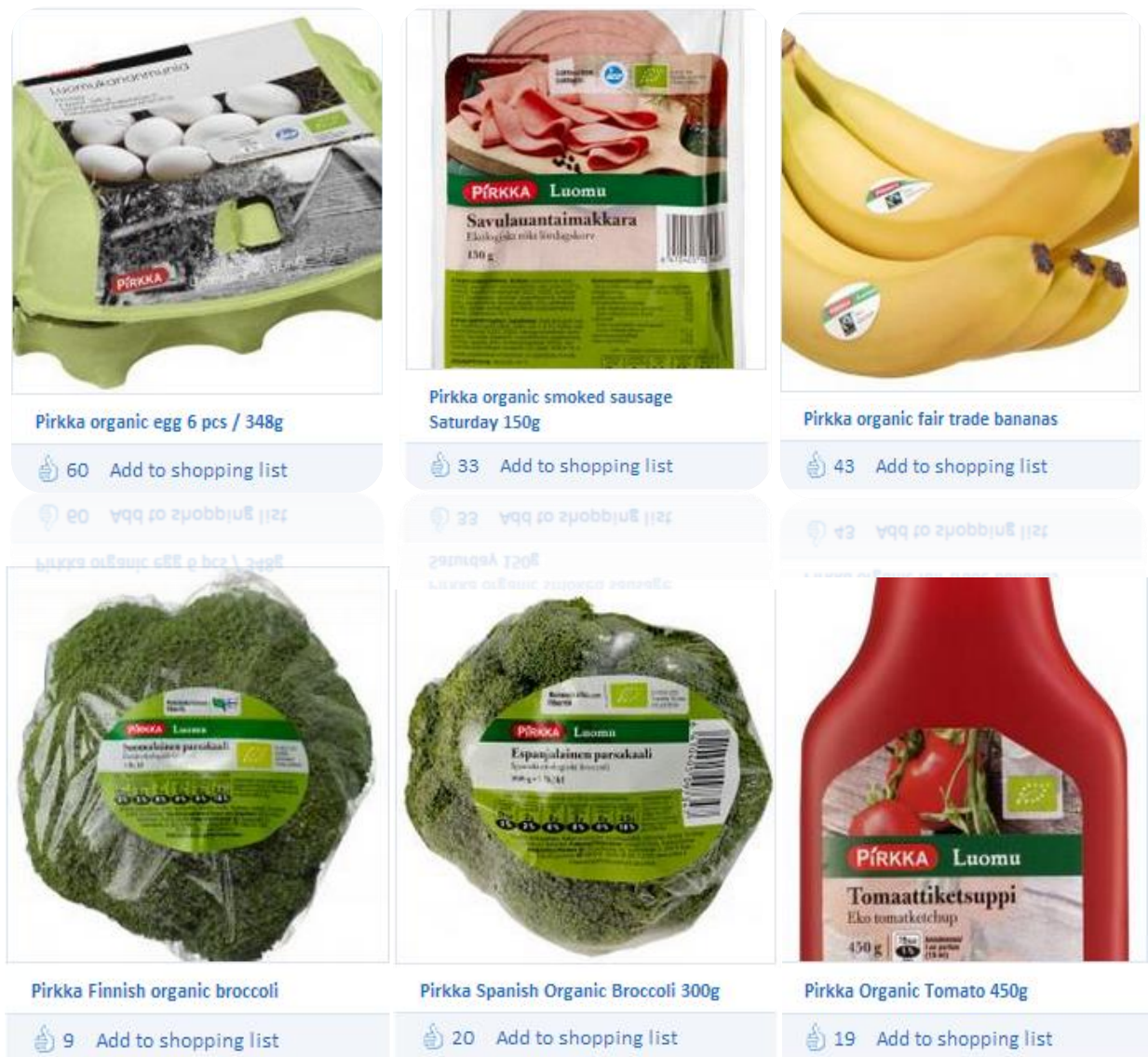


FIGURE 7. Pirkka organic food products (Modified from Pirkka 2013)

Pirkka organic products originate from domestic and foreign countries. The country of origin is clearly indicated on the product label. Furthermore, K-food stores are tracking customer selections of organic food products on its website. When customers click “Thumps up” icon, they add a product into their online “Shopping list”. The chosen organic product gains 1 point as the same time. The

high-graded organic food products are probably the customer favorites. With this web design, K-food stores attempt to understand customer preferences for organic foods.

At the local level, K-citymarket Oy Lahti Paavola also strives to make organic food products widely available. Following the mainstream of healthy foods, K-citymarket Oy Paavola is offering a wide variety of organic food products, in addition to gluten-free and lactose-free products. Especially, healthy food products are converged on a particular department, which is called Terveellisen Elämän Aakkoset. Figure 8 below displays the presentation of Terveellisen Elämän Aakkoset in K-citymarket Oy Lahti Paavola. The photo in this figure was taken by the author in December 2013. It is noteworthy that the presentation of the department is subject to adjustments over time.



FIGURE 8. The K-citymarket specialized in health food department

At the beginning of the year 2013, the Terveellisen Elämän Aakkoset department was established in order to enhance the visibility of both organic and other healthy food products. However, K-citymarket customers appear to pay little attention on this healthy food department. By the representative observation, customers tend to spend little time visiting the department, not to mention purchasing. Although the concise data of organic food turnover is not available owing to the limited information system, the case company perceives the low growth of organic food sales as they have been traced to some specific organic food products. Only a few of organic food products are fast-selling such as organic milk, organic vegetables, organic fruits and so on. Customers seem to select organic food products based on certain benchmarks, corresponding to their desires and needs. K-citymarket is striving to comprehend the customer preferences for organic foods to the greatest extent possible. From the K-citymarket viewpoint, customers perceive organic foods as the premium options. Therefore, the case company attempts to offer the organic food products that are requested by the majority of customers. When customer demand is highly fulfilled, K-citymarket probably enhances its prestige and position in the organic market. (Laaksonen 2013.)

3 DETERMINANTS OF ORGANIC FOOD PURCHASE

This chapter investigates consumer purchase of organic foods, which is triggered by motivations or refrained by impediments. Demographic traits of consumers, which are connected with their selection of organic foods, will be portrayed in details. The results of preceding research will be rigorously referred to in order to comprehend consumer opinions about organic foods. Consequently, the factors affecting organic food consumption will be discovered.

3.1 Motives

This sub-chapter presents four major triggers for organic food consumption, namely the concern for health, sensory attributes, ethical concerns and social influence. The four factors include particular sub-factors that are articulated in details.

3.1.1 Concern for health

Health conscious consumers are portrayed as individuals who are aware of their eating habits and motivated to improve their health and life quality relentlessly. Such consumers are willing to take part in physical activities and nutritious diets, furthermore, are prepared to overcome challenges in order to pursue the healthy lifestyles. (Kraft & Goodell 1993, 18-25.) The strong relationship between the concern for health and organic food consumption is clearly evidenced in a great amount of studies.

Paul and Rana (2012, 412-422) demonstrate that the healthy content is the single biggest motivation for organic food consumption, followed by the environment benefit. Most consumers express that health benefits of organic foods gives them quality assurance and the high level of satisfaction. Regarding nutrient content, Soil Association (2000) and The Soil Association and Sustain (2001) prove that organic foods are scientifically richer in amount of vitamin C compared to

conventional foods. Similarly, a study from The Organic Center found that when being grown under the same conditions, organically grown foods contain approximately 30 per cent higher of the antioxidant level in comparison with conventional substitutes (Benbrook 2005, 50). From the consumer perspective, organic foods with the superior contents surpass conventional foods.

Furthermore, in their study, Mondelaers et al. (2009, 1120-1139) discover that consumer reactions to the word “residue” are considerably strong. The result indicates that consumers are risingly cautious; that is, they do not only prefer healthier choices but also tend to avoid risks and contaminants at any costs. Regarding the farming method, the renunciation of fertilizers, preservatives, pesticides and chemical substances in organic farming increases consumer confidence in food safety.

An aspect related to food scares is the usage of GMOs, which faces with a widespread objection. Consumers hesitate to eat unfamiliar foods because of the avoidance of GMOs (Saher et al. 2006, according to Lähteenmäki et al. 2002, 324-331). Given that context, organic foods are legally guaranteed to be free from GMOs, which directly adds confidence to consumers in food safety. A recent study among 3,621 Finnish aged between 15-60 aims to explore attitudes and opinions towards genetically modified foods and organic foods. Unsurprisingly, a large proportion of participants express strong opposition to genetically modified foods. On the contrary, their reactions to organic foods are significantly positive. (Saher et al. 2006, 324-331.)

Besides the attributes mentioned above, in their study, Lockie et al. (2004, 135-146) filter numerous factors and find that “Natural content” motivates organic food consumption strongly. Although consumers admit their uncertainty of organic quality, they still buy organic foods as long as they “see organic foods natural”. Organic foods are perceived to be rich in nutrients and free from artificial additives, therefore, consumers consider them to be healthier than conventional foods (Magnusson et al. 2001, 209-227). The results of these two studies are consistent with those of several preceding ones.

Consumers are buying organic foods in favor of their private benefits, which somewhat outweigh public benefits regarding environmental issues. The concern for personal health is the stronger motive than environmental benefits (Paul & Rana 2012, 412-422). Mondelaers et al. (2009, 1120-1139) also conclude that consumer preference for organic vegetables is based on healthy traits rather than environmentally friendly traits.

Interestingly, consumers also perceive organic foods to be of high quality because of the premium price (Hill & Lynchehaun 2002, according to Elliott 2000, 526-542). Prices of organic foods, indeed, can signal its value. Although consumers consider organic foods as costly choices, over 90 per cent of them consent to pay premium prices for the healthy content (Paul & Rana 2012, 412-422). It seems that consumers somewhat acknowledge, “Quality has its price”. However, the degree to which extra costs can be paid for organic foods is not clearly identified yet.

3.1.2 Sensory appeal

A growing number of scientific studies underpin that sensory appeal is a contributing factor of organic food purchases. Food-related sensory traits are associated with appearance, texture, taste, smell and flavor. The appearance of food products may refer to color, graphic, presentation or package. Food textural properties are varied and might be described by several words such as crispy, crunchy, hard, tender or dry. Sweetness, saltiness, bitterness, sourness, and umami are connected with taste. Lastly, smell and flavor are sensed by inhaling.

Apparently, consumers are buying a large amount of organic vegetables and fruits, which is exceptionally higher than that of any other organic products. They seem to associate the term “organic” first with non-processed products, which have the quality is primarily judged by the appearance. Saher et al. (2006, 324-331) suggest that the preconception of the word “organic” probably roots from an intuitive nature. In other words, consumer preferences for organic foods are formed by their own experiences, rationale and belief, rather than scientific evidences.

The Oxford Dictionary (2013) defines the word “organic” as “produced from living things”, which are supposed to expose vivid characteristics. Color-based features are apparently one of the most important indications for freshness, which in turn implies high quality. Supporting this thesis, González (2009, 498-510) demonstrates that “freshness”, “ripeness” or “spotless” along with health and price are the important criteria for consumers when considering buying organic foods.

The observation of food products is regarded as a pre-purchase factor that immediately affects the intention and decision to buy. Meanwhile, taste preference for a food product is determined in post-purchase phase. Due to the fact that the taste of a food product is only born during consumption, taste particularly influences the continuation of buying. Better taste of organic foods holds much appeal to consumers, as they feel gratified and enjoyable. Zakowska-Biemans (2011, 122-137) finds that sensory attributes are the most important motives for buying organic foods. In other words, sensory attributes even outweigh the health benefit. Consumers appear to sacrifice nutritional benefits for better taste.

Magnusson et al. (2001, 209-227) conduct a study among 2,000 Swedish consumers and reaffirm the importance of taste. The most predominant criterion for buying four organic products namely milk, meat, potatoes and bread is “good taste”. Surprisingly, “organically produced” is the least important criterion. Consumers are even buying organic foods in anticipation of the superior taste, which seems to override other food criteria.

Regarding the visual effect, the high distinction in packages between organic and conventional foods could stimulate organic food consumption. Hill and Lynchehaun (2002, 526-542) conduct an interview with British organic food consumers and demonstrate that they expect to buy organic milk with a distinctive package. On the one hand, it is convenient to find organic milk products when they are placed next to conventional substitutes. On the other hand, the vivid and well-designed packages of organic milk are likely to reflect positive quality from the consumer viewpoint.

The material of packages is also an important purchase criterion for organic buyers. Paul and Rana (2012, 412-422) conclude that environment friendly packaging induces consumers to buy organic foods. In their survey, approximately 81 per cent of the respondents cite that eco-friendly, recyclable or reusable packaging adds more value to organic products. Presumably, both the design and material of organic food packages are able to convey meaningful messages regarding environment benefits to organic food consumers.

3.1.3 Ethical concerns

Consumers are increasingly preoccupied with food safety and quality, yet the concern for health is not the only key factor of organic food choices. In addition, consumers are conscious of environmental conservation to a great extent. Consequently, they proactively take actions that nurture the environment. For instance, consumers consider “environmental friendly” as a crucial criterion for food products. Consumers, who have strong moral convictions, favor buying fair trade, green or sustainable products, as they promote fairness for farmers, animal welfare and the environment. Within that context, organic foods suffice to be ethical choices.

Paul and Rana (2012, 412-422) highlight that “environment friendly technology” and “environment friendly packaging” benefits are the significant reasons for buying organic foods, ranking right after the health benefit. Organic food consumers confirm that both “eco-friendly content” and “eco-friendly packaging” add value for organic foods.

In their research, “Exploring the gap between attitudes and behavior: Understanding why consumers buy or do not buy organic food”, Padel and Foster (2005, 606-625) discover another key determinant is the consumer concern over the environment. Aware of global warming, consumers are taking several actions to enhance the environment. Interestingly, consumers associate organic quality with local foods. Thus, they are buying organic foods in support of the environment protection as well as local farmers. The transportation of locally

produced foods could lower the food price and emission to the environments compared to that of foreign foods.

Numerous advocates for local foods are taking actions worldwide. Founded in 2003, “Local first” is a group advocating for small and locally owned businesses while “Buy local” campaign assists local enterprises in earning the higher sale growth in the US. The foods supermarket chain, Whole Foods Market, declares that local label is only marked for the foods “travelled less than 7 hours from farm to store”. (Solomon 2009, 44.)

Interestingly, buying local foods does apparently not only result from ethical-related motivations but also “trust”. The products are of reliable quality if only they are “almost passed over the garden fence” (Padel & Foster 2005, 606-625). According to Laaksonen (2013), K-citymarket Oy is increasingly offering local foods along with organic foods. The local potatoes and vegetables, which most of them are not attached with “Organic” but “Local” (paikallinen) label, have been sold at a high frequency. It can be said that consumer trust in food naturalness is connected with local food products. Although local foods are not necessarily organic, consumers seem to imply that both terms “local” and “organic” are the same and hold positive attitudes towards buying both local and organic foods.

3.1.4 Social influence

Consumers are not isolated in their food choice process but influenced by several external elements. People who are important for consumers play a significant role in their process of purchasing foods. Notably, consumer organic food choices are mainly determined by the knowledge acquired from diverse sources such as books, newspaper, advertisements as well as other people's advice. In some cases, consumers buy organic foods to be trendy or to experience new taste. Several studies indicating social effects on organic foods choices are demonstrated below.

Presumably, crowd psychology induces consumers to make entry into buying organic foods. Pursuing healthy eating habits and nurturing one's well-being are apparently prevailing societal trends. Several consumers consider organic foods as

trendy and healthy products (Darnhofer et al. 2007, 112-121). Further, consumers are highly motivated by people who are important to them such as family, friends or even idols. A recent survey reveals that organic buyers value their friends, family members and/or scientific articles as the most reliable sources of advice on organic foods (Hamzaoui-Essoussi & Zahaf 2012, 63-88).

Consumers who have shared objectives for sustainable living are gathering, as a result, countless groups, associations or new market segments emerge such as “Lifestyles of Voluntary Simplicity” (LOVOS) or the Association for Ecological Life and Production Style (VELT), “Lifestyle of healthy and sustainability” (LOHAS) and so on. Solomon (2009, 42) notes that for several years, the US “Lohasians”, who practice LOHAS, are the catalyst for the dramatic growth of organic foods in particular and eco-friendly products in general.

Moreover, Hill and Lynchehaun (2002, 526-542) state that marketers elevate the positive image of organic foods extensively in the media. As a result, organic foods are represented as fashionable items, which appeal strongly to consumers. Driven by consumer demand, distributors, wholesales, or retailers strive to provide organic foods sufficiently. Laaksonen (2013) emphasizes that organic foods could enhance K-citymarket position in the food provider market, as organic foods are perceived to be trendy and premium. In brief, the combination of various inter-related factors, for instance, society and business management will influence consumer purchases of organic foods.

The concern for family member health is another motivation for purchasing organic foods. The presence of children in the household is closely linked to consumer decision to buy organic foods (Hill & Lynchehaun 2002, 526-542). According to Curl et al. (2003, 377-382), organic baby foods are scientifically proved to have the lower risks of pesticide residues than those of conventional baby foods. One of commonly used pesticides in baby foods and drinks is organophosphorus pesticides. The National Institute of Environmental Health Sciences reaffirm that the level of organophosphorus pesticide exposure of children eating organic foods is considerably lower than those who eat inorganic foods. The finding possibly motivates several parents to incorporate organic foods into their children meals.

In order to summarize the motives for buying organic foods in this sub-chapter briefly, Figure 9 gives the top reasons for the UK consumers to buy organic foods, which is reported by Soil Association (2012). The report is presented to be contrasted with the reasons examined in this sub-chapter. Although the UK is one of the largest organic food markets in Europe, the findings of the report obviously cannot be generalized to other European markets.

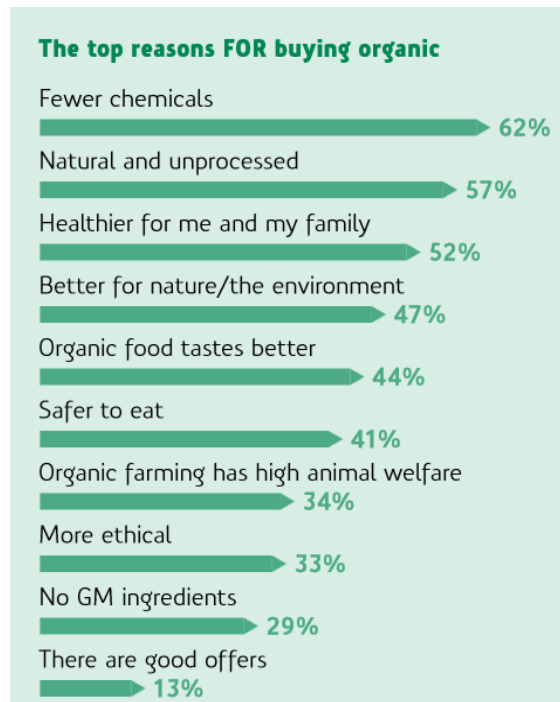


FIGURE 9. The top reasons for the UK consumers to buy organic foods (Soil Association, 2012)

As shown in Figure 9, most of the high-rated reasons are connected with the health issue such as natural content, safety, GMOs and chemicals. Ethical concerns could be cited as the second biggest motivation. A large number of consumers buy organic foods to provide the healthy nutrition not only for themselves but for their families as well. “Good taste” is the attribute retaining organic food consumers. All of the above motivations are already discussed and covered, except the reason “good offers”.

3.2 Obstacles

While the previous sub-chapter shows the motives for buying organic foods, including the concern for health, sensory appeal, ethical concerns and social influence, the following sub-chapter encompasses the constraints to the purchases of organic foods.

3.2.1 Price

From the consumer perspective, organic foods might differ from their conventional cousins mainly in price. Due to the fact that consumers are risingly price-conscious, they hesitate to start, continue or increase buying organic foods. The empirical evidences from pre-existing studies will clarify the role of price in consumer purchase of organic foods.

Price is predominantly the deciding influence on the amount of food expenditure for organic foods. High price causes two fold effects. On the one hand, several consumers agree that higher prices usually indicate better quality (Hill & Lynchehaun 2002, 526-542). On the other hand, high price probably refrains consumers from buying organic foods more.

Although consumers are aware of the beneficial traits of organic foods, they keep buying inorganic foods in order to save costs. High price further discourages new buyers and deters existing consumers from increasing in spending on organic foods. (Mondelaers et al. 2009, 1120-1139.) Notably, a considerable number of young consumers express their strong demand for organic and healthy products (Magnusson et al. 2001, 209-227). However, they insist that organic products are unaffordable. Young consumer demand is not converted into the actual purchase because of their low purchasing power. Price reduction is widely proposed as an immediate and feasible countermeasure for this financial problem. However, Hill and Lynchehaun (2002, 526-542) assert that high costs of organic foods are already incorporated in the farming method, which relies on nature-based approaches. Through many distribution channels, the production costs accumulate and eventually reach at a high level in the stores. Thus, it is not an easy task to

lower the prices of organic foods. It can be concluded that high price is still the significant obstacle to purchasing organic foods. To a broader extent, price is a heavyweight barrier to the continuing expansion of organic foods (Díaz et al. 2012, 318-334).

3.2.2 Perceived value

Yet offering the mainstream products is only half the journey, to obtain actual sales, companies should enhance consumer perception of the product value. The perceived value of a product is the extent to which consumers recognize its particular quality. Perceived value affects directly the investment of consumer in purchasing a product in terms of money, time or effort. In other words, consumer willingness-to-pay mainly depends on their evaluation of worth for a product. (Dodds 2003, 5 & 6.) Lack of knowledge about organic foods might explain the consumer confusion over organic food value.

According to Hill and Lynchehaun (2002, 526-542), consumers express that the real meaning and benefits of organic foods are not convincing and explicit. Although consumers consider organic foods to be of higher quality, they do not know “what organic foods are” sufficiently. Consequently, extra charges for organic foods are still not justified. From the consumer viewpoint, organic foods and conventional foods should be priced at the same level.

Currently, the lack of knowledge indeed holds back consumers from choosing organic foods. In the personal interviews, Díaz et al.(2012, 318-334) elicit the knowledge of organic foods from frequent tomato consumers. At first, respondents are asked whether they know the particular characteristics of organic products and over 80 per cent of them say “Yes”. In general, a high number of consumers are aware of organic foods; yet, the details of their knowledge about organic foods bring surprising results. Over half of the respondents are of the opinion that organic foods originate from traditional farming systems. Further, about 70 per cent of the respondents assume that organic foods are simply “fresh food stuffs” and the same as dietetic or other functional foods. Seemingly,

consumers are not able to distinguish special features of organic foods from those of conventional alternatives. The study concludes that besides high price, the inadequate knowledge of organic foods is the second barrier.

Consumer lack of information about organic foods further causes the confusion over product labels. In the above-mentioned interview, Díaz et al. (2012, 318-334) discover that only a fifth of the respondents are able to recognize the EU leaf logo for organic food products among other regional and private logos. Similarly, up to 48 per cent of European consumers admit their inadequate understanding of nutritional labels on food packaging, says by Nielsen Global Survey of Food Labelling Trends (2012). This shortage of knowledge may lead to the selection of unhealthy foods or the avoidance of unfamiliar but healthy foods, as consumers are incompetent to make appropriate decisions.

Magnusson et al. (2001, 209-227) conclude that without seeing distinct labels, over 90 per cent of sampled consumers find it difficult to know if a food product is organically produced. In their study, Magnusson et al. choose four organic food products as the studied objects including organic bread, meat, milk and potatoes. Consumers easily recognize that milk is organic based on the packages and labels. Organic bread, meat and potatoes without attached explicit labels may cause suspicion. Apparently, the difficulty of recognizing whether a food product is organic depends on packages and labels. Without seeing the indication of organic certification marks, consumers may feel uncertain about the authenticity of organic quality.

Further, Nielsen Company (2012) reports that consumers are either never or only sometimes consider organic labels to be trustworthy. Consumers are skeptical about nutrition claims, meaning the reliability of ingredient information presented on the packages is relatively low. With the evidence of past studies, consumers distrust in organic food quality is confirmed to be a barrier to buying (Padel & Foster 2005, 606-625; Díaz et al. 2012, 318-334).

Besides being doubtful about organic food quality, consumers question if the high price of organic foods is justified in terms of the quality obtained. Organic foods are priced at a higher level than conventional substitutes. Thus, organic foods are

expected to demonstrate premium significance in terms of quality. If it is easy for consumers to recognize the distinction between organic and inorganic foods, the benefits of organic foods will outweigh the costs. Otherwise, organic food value does not justify the high prices. (Padel & Foster 2005,606-625.)

Consumers are dissatisfied with organic foods because they do not recognize the better attributes. As evidenced above in the sub-chapter named “Sensory appeal”, consumers are buying organic foods in anticipation of inferior taste. However, taste is a subjective matter. A certain number of consumers are disappointed at organic food quality. They state that no improvement in the taste of organic milk discourages them to return buying. Consumers who no longer buy organic milk admit that “I did not buy it again as it just tasted like normal milk”. It is suggested that consumers seemingly link “high price” to “better quality”, not only for organic milk but also for organic foods in general. They stop buying when recognizing organic foods are not good value for money. (Hill & Lynchehaun 2002, 526-542.)

Moreover, content with current purchase demotivates consumers to attempt or seek for better products. Swedish consumers are not curious for new products as they are satisfied with the existing ones (Magnusson et al. 2001, according to Mathisson et al. 1994, 209-227).

3.2.3 Availability

The concept of four Ps of Marketing, which was developed by McCarthy and Kotler, includes the factor “Place”. Later on in 1997, Lauterborn introduced an improved version named four Cs, which involves the factor “Convenience” or “Chanel”. (Solis 2010, 260.) Regardless of the name, all of those marketing tools consistently stress the importance of one factor in marketing, which is product availability. In other words, the more available a product is, the higher probability of organic purchases will be. Regarding organic foods, several studies cite that the supply shortage causes the low rate of purchases.

According to Paul and Rana (2012, 412-422), non-availability is the biggest barrier to purchasing organic foods. In their study, consumers claim that not only high price but also limited product varieties restrict their purchase amounts of organic foods. The reason for non-purchase due to the shortage of organic foods is two times higher than high price. Consumers interested in organic foods have to face with the inconvenience caused by the supply shortage. They might have to go to different selling places in search for their desirable organic foods. The challenging condition probably complicates consumer access to organic foods.

Consistent with the findings from previous studies, Hill and Lynchehaun (2002, 526-542) support that the poor product variety is a hindrance to the consumption of organic baby foods. It is a fact that the digestive system of infants and children do not favor much fruits and vegetables, which are the most common organic foods. Thus, several parents are searching for other organic products such as cereals or porridges. Nonetheless, those organic foods are not readily available yet. In that situation, consumers tend to either switch to conventional foods or simply quit seeking for their desirable organic food products.

Laaksonen (2013) claims that the shortage of variety in domestic supply induces K-citymarket to import organic foods from foreign countries such as Spain, Costa Rica and many more. Despite the organic food quality, imported organic products are usually interlinked to trust issues. Consumers are seemingly skeptical about the quality of imported organic products, which were transported for a long distance. However, the supply of imported organic products could still meet the temporary demand for organic food diversity.

The presentation and location of organic foods are evidenced to influence the purchases of organic foods. According to González (2009, 498-510), the product presentation and location are as important as other aspects such as appearance, price, the health benefit, when considering buying organic foods. Hill and Lynchehaun (2002, 526-542) stress that consumers prefer to have organic foods positioned next to conventional substitutes. The reason is that it is easier for them compare organic and conventional foods in terms of price or product range. The similar concept is currently applied to K-citymarket (Laaksonen 2013). Most of the organic food products are placed next to the inorganic one in favor of the

consumer interest in comparing prices and product variety. In other words, the location and presentation probably maximize the access to organic foods.

Habitual shopping behavior is another obstacle to buying organic foods.

Consumers tend to choose conventionally produced foods in order to save time and effort. For consumers with limited time, it is “easier and quicker” to keep buying specific conventional foods (Hill & Lynchehaun 2002, 526-542).

Similarly, California consumers are discouraged by “the extra time it takes to search for organic foods” (Magnusson et al. 2001, according to Jolly 1991, 209-227).

3.3 Consumer characteristics

In addition to the understanding of triggers to organic food purchases, the segmentation of customers is vital. It is a fact that the case company possibly saves resources by scaling down a large and unmanageable market segment to a small and profitable one. The target consumers already possess the purchasing capacity and the desire for organic foods, thus, they are likely to start or continue buying. This sub-chapter draws on past studies in order to portray the characteristics of the prospective consumers.

Through several studies, the only one characteristic emerging consistently is education. Well-educated consumers tend to favor organic foods regardless of age, gender or religions. Magistris and Gracia (2008, 929-947) find that Italian consumers who are more knowledgeable about organic foods believe that organic foods healthier and of higher quality. Paul and Rana (2012, 412-422) as well as Dimitri and Dettmann (2012, 1157-1183) also find a strong and positive relationship between consumer education level and the frequency of purchasing organic foods. It can be concluded that consumers with the higher level of education purchase the higher quantities of organic food products.

Financial resources are undoubtedly the predominant influences on making food choices. Consumers with higher income are more likely to buy organic foods (Dimitri & Dettmann 2012, 1157-1183). Low-income consumers concerned about

health and food safety also advocate organic foods, but to a lesser extent, as they confront with financial constraint. Magnusson et al. (2001, 209-227) present that young consumers aged between 18 and 25 are more positive about organic foods than the elderly ones. Despite the fact that young people have strong interest and willingness to buy organic foods, they do not actually make a purchase owing to the limited budgets.

Budget constraints could also account for the desire-action discrepancy in the elderly segment. The elderly consumers pay high attention to food safety and perceive organic foods as healthy options. However, a survey finds that the number of organic food consumers drops when respondents reach their 60s. This decline may reflect a drop in income when respondents are retired. (Lockie et al. 2004, 135-146.)

Besides, there is a gender distinction in organic food purchases. Female consumers buy organic foods more frequently than male consumers (Lockie et al. 2004, 135-146). This fact is comprehensible as women are usually the main people responsible for shopping in households. They also judge organic foods positively and show strong interest in buying organic foods (Magnusson et al. 2001, 209-227).

In general, organic food consumers could be portrayed as well-educated and affluent people. Moreover, female consumers appear to form a predominant and prospective segment. Companies could segment organic food consumers on the basis of gender, education and income.

3.4 Shepherd food choice model

Food choice is a complicated process, which is influenced by a wide range of factors. Researchers, in attempt to encompass numerous elements of food choices, have established many qualitative models. (Shepherd 1985, 807-812; Furst et al. 1996, 247-266; Connors et al. 2001, 189-200; Bisogni et al., 2003)

Shepherd (1985, 807-812) evolves a model of consumer food choices consisting three components. Firstly, foods with its nutrient content and physical properties naturally contribute to physiological effects on consumers directly. Foods fulfill hunger and enhance appetite as well as satiety. The second component is the individual with psychology factors such as personality, mood, belief or experience of foods. Food choice is also partly driven by consumer perception of food properties regarding sensory attributes. Notably, taste, texture, smell, or appearance of a specific food product are connected with individual preferences. In other words, perception of sensory attributes induces a consumer to like or not to like that food product, resulting in the decision to buy or not to buy it. The third component in food choice process is the socio-economic environment, which includes price, availability, and cultural issues.

The synopsis of Shepherd food choice model is illustrated in Figure 10 below.

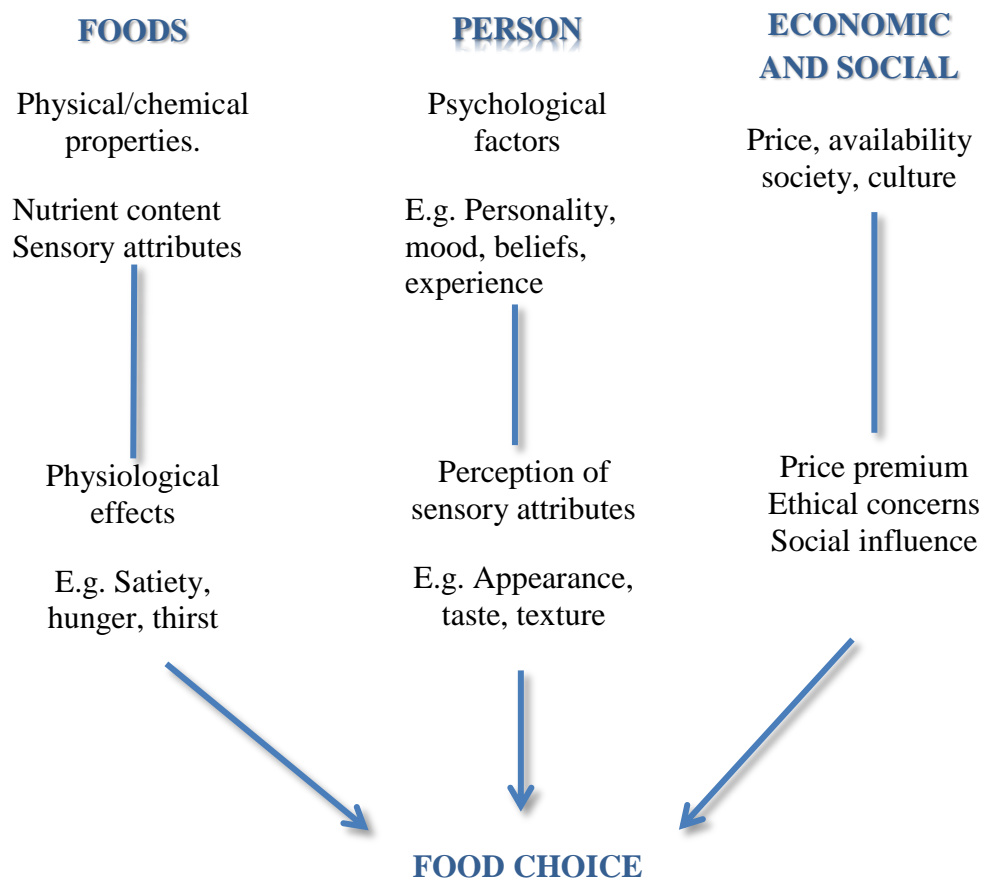


FIGURE 10. Shepherd food choice model (Modified from Shepherd, 1985)

The Shepherd food choice model does not enable quantitative tests and only lists the factors of food choice. Nonetheless, several variables of food choice process included in this model are possibly the ground for further research on consumer selection of foods. From the author perspective, this model reflects the fundamentals of consumer food choices. The motives and obstacles to buying organic foods as well as consumer characteristics are classified into three categories corresponding to Shepherd's model. Organic food contents reflect quality and deliver sensory attributes. Consumers, as an individual, have their own characteristics that influence their selection of organic foods. For example, the concern about healthy foods might depend on consumer age and gender. Economic and social influences probably lead consumers to be more conscious of prices or ethical attributes of organic foods. In this study, the Shepherd food choice model is chosen as a summary of factors influencing organic food purchases.

4 QUESTIONNAIRE DESIGN PROCESS

The process of designing a questionnaire is critical to this research. Thus, a substantial amount of time and effort is necessarily invested in order to construct an effective questionnaire. It is a fact that the quality of responses is strongly driven by the quality of the questionnaire. A well-designed questionnaire will appeal to respondents and consequently reap fast and accurate answers.

Conversely, a complex and ambiguous questionnaire might cause misunderstanding, discourage respondents, and deliver incorrect answers. Because of the significance of the questionnaire, the following sub-chapters elaborate upon the construction of the questionnaire used in this study, in hope that the description will be useful for other researchers.

In the data collection process related to market research, two widely used methods are self-completion and interview-administered (Brace 2008, 2). Both of them are applied in this study. However, this sub-chapter only presents the description of the self-completion survey, which allows researchers to obtain a large amount of data for quantitative analysis.

According to Naval (2011, 70), an effective questionnaire is the key to a high-achieved survey, thus, designing a questionnaire should be a systematic process. Three major phases involved are pre-construction, construction and post-construction. The figure below visualizes the process of designing a questionnaire for the research purpose.

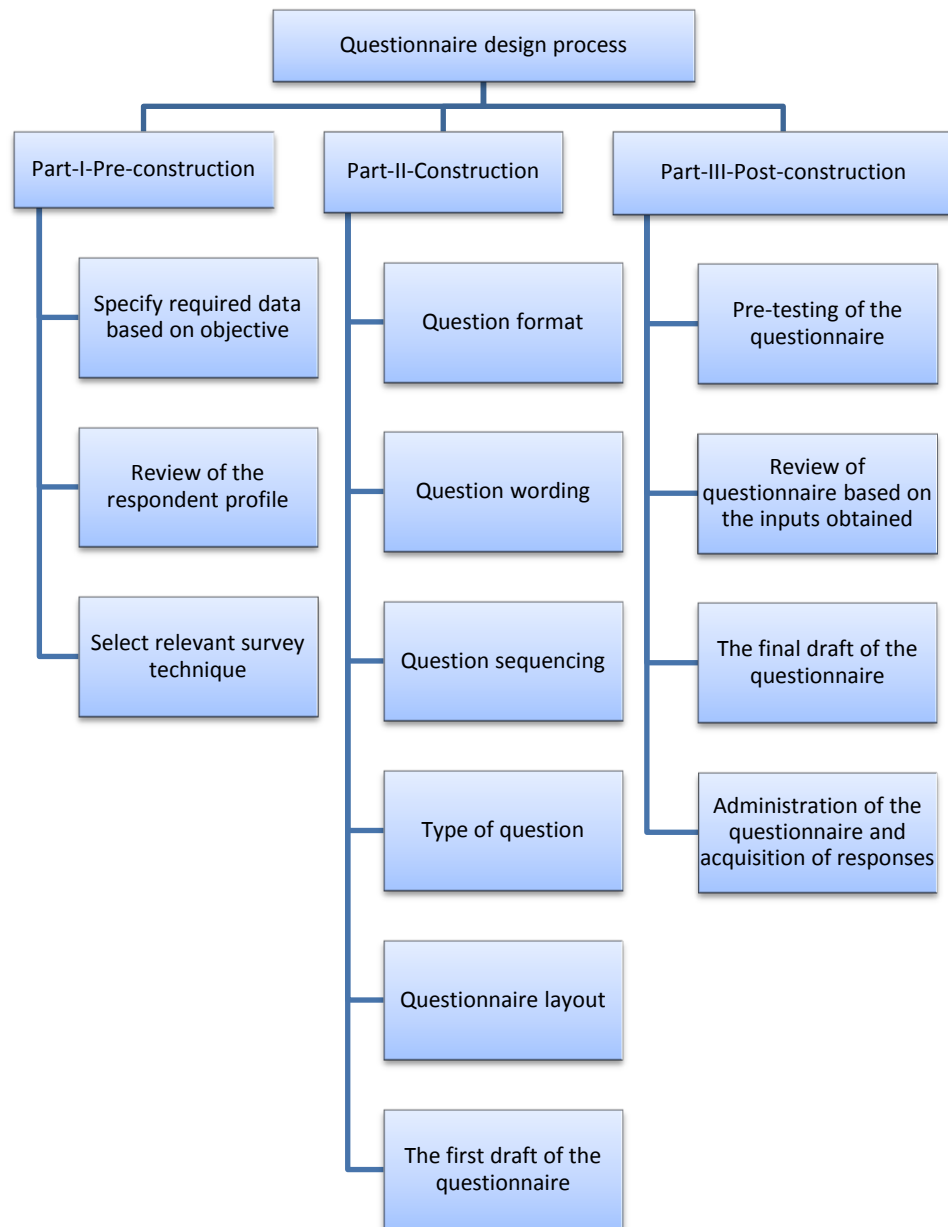


FIGURE 11. Questionnaire design process (Modified from Naval 2011, 72)

4.1 Pre-construction

The first phase of the questionnaire design process is the pre-construction phase consisting three sub-steps. The first step is to identify the concrete data needed for achieving the research objective. The next step is to portray respondent characteristics. The final step is to decide the most appropriate survey technique.

In the first and foremost step, it is necessary to review thoroughly the primary research objective and subsequent research questions, which are already identified in the beginning. This step ensures that the collected information will correctly address to the research problems and the research questions. This step should neither be overlooked nor skipped. Otherwise, the data obtained will be irrelevant or even useless, while the data needed is missing. Consequently, researchers might have to reconstruct a new questionnaire, resulting in additional time and effort. This unexpected scenario can be avoided by carefully specifying required data in the light of the research objective. (Naval 2011, 71.) As stated above, the objective of this research is to assist the case company in understanding consumer selection of organic foods. The research questions are recapped briefly as follows: motivation and obstacles to buying organic foods, relationships between purchasing patterns and consumer characteristics, and finally their criteria for organic foods. Therefore, the question contents will revolve around the issues in the research questions.

If the first step identifies information regarding the research question, the second step takes into account the data associated with respondent demographic traits (Naval 2011, 72&73). In this study, consumer purchase of organic foods is definitely connected with their affordability; therefore, it is necessary to include the question of financial budgets in the questionnaire. Otherwise, the data analysis would not be conclusive and the result is ambiguous.

The third step in this pre-construction phase is to decide an appropriate survey technique. In this case, self-completion surveys are utilized in accordance with the research method. The survey technique will probably drive the question format. For instance, lengthy and open questions will be asked during the interviews with the K-citymarket representative. Meanwhile, the self-completion survey for consumer obviously should contain comprehensible and succinct questions. The detailed formation of questions in the survey will be described later on.

4.2 Construction

This phase comprises several decisions on question format, question wording, question sequencing and question response choices. In addition, the process of outlining and compiling the first draft of questionnaire is also discussed. (Naval 2011, 73.)

Question format consists of open-ended and close-ended questions. The open-ended question, which is so-called “free-to-response” question, is unstructured, thus, it enables respondents to create their own answers (Brace 2008, 51) . The close-ended question, in contrast, is structured and limited to a small number of answers. Close-ended questions include “yes/no”, multiple-choice and scale questions. (Naval 2011, 73.) All of three kinds of questions are utilized in this questionnaire.

This self-completion survey comprises mostly closed-ended questions in order to save respondents time and their effort to write the whole answers. Besides, a few open-ended questions will follow the preceding close-ended questions in this survey. This design will save respondents from having to choose limited alternatives and motivate them to voice their own thoughts of the issues. Furthermore, Brace (2008, 5) affirms that the open-ended question is ideally used to discover the triggers for an action, for example, reasons to buy a product. Verbatim answers are available for analyzing reasons for an action.

For the purpose of demographic information, closed-ended questions consisting “yes/no” and multiple-choice questions are suitable in this questionnaire. However, those types of questions are not effective in discovering attitudes or opinions. Consumer opinions about organic foods and other related issues are not always definite. Their answers are neither black nor white, but uncertain. Therefore, the Likert-scale questions are used for rating responses. Scale responses provide a wider range of possible degree and quantify consumer answers to be used for the statistical analysis. (Pallant 2010,9.) A disadvantage of scale question is that it takes respondents longer to complete than multiple-choice questions. The reason is that respondents have to read the statements entirely instead of short phrases (Brace 2008, 67).

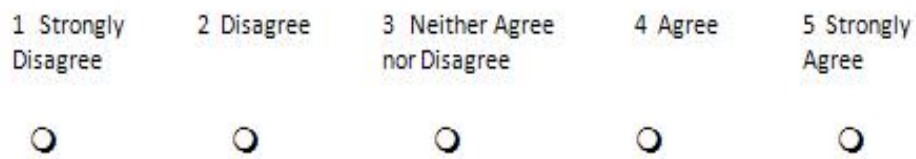


FIGURE 12. Likert scale response

Figure 12 shows an example of an answer to Likert scale questions. This answer is comprised of a five-point scale. Concerning Likert scale questions, the number of points on the scale should be considered carefully. The common size of a scale ranges from five to 10 points (Brace 2008, 71). Although Coelho and Esteves (2007, 313-339) assert that a ten-point scale result in better properties than a five-point scale, the author still applies the five-point scale to the questionnaire. The reason is that the author considers the situation when the survey occurred. The respondents are either elderly or occupied with shopping intents. Further, with the paper self-completion questionnaire, the additional page spaces are required for more points scale. Hence, the five-point scale is friendly for the elderly and appropriate for simplifying workload within a timed context.

Question wording relates to the question clarity affected by word choices and sentence structures. Researchers are suggested to choose the appropriate words in the light of the respondent average knowledge. (Naval 2011, 73.) In this survey, the usage of GMOs in foods is not mentioned in case respondents might not know about GMOs and might give the incorrect answers. Selecting the simpler words while retaining the original meaning will stimulate respondents to keep answering the survey. The target respondents include elderly people, thus, the questions aim to be succinct and easily comprehensible to them. The survey also targets both the respondents who already bought and who never bought organic foods before. The questions related to the experience of organic foods are separated for organic food consumers. This design prevents non-organic food respondents from feeling unreasonable and discouraged by some organic-food related questions. In addition, no definition of organic foods is given in the interest of exploring

consumer responses to the term “Organic”. Overall, paying deep attention to wording a question could produce an effective questionnaire.

Question sequencing emphasizes on the appropriate arrangement of every single question. Rajiv and Marco (2006, 91) state that there are three types of information in a questionnaire including basic information, classification information and identification information. Basic information is the utmost importance, as it will be used to answer the research questions. Classification information is related to demographic data of the respondents. Accordingly, respondents could be categorized into a specific segment for analyzing. Identification information shows the contact information of respondents such as name, telephone number or address. Researchers use identification data to contact respondents for further interviews or to send them the promised incentives. Three types of information should be arranged in a logical order so as to create positive and pleasant feelings for respondents.

In this study, the identification information is asked first, followed by, in order, the classification and basic information. The questions related to the classification data might ease respondents into the questionnaire, as it is simpler for them to fill in personal data. An easy start also saves respondents energy for answering the detailed questions asked later.

Question response choices refer to the number of response alternatives for multiple-choice questions. Too many alternatives may overwhelm respondents while an insufficient amount of them might miss important data. When in doubt about the coverage of the response choices, it is sensible to use an open-ended question. Besides, drawing on previous research on the chosen topic supports the decision on the response alternatives. (Brace 2008, 85.) For instance, specified to this survey, the decision on shopping channels for organic foods is made based on the reports of the Finnish organic market.

In the study named “Development of a measure of the motives underlying the selection of food: the food choice questionnaire”, Steptoe et al. (1995, 267-284) postulate a questionnaire consisting of the determinants of food choices. In this study, some of the determinants are selected as response choices in the

questionnaire. Those determinants capture multidimensions of food choices including health, ethical concerns, familiarity, sensory appeal, convenience, natural content and price. The author decided to filter out two factors, which are mood and weight control. Those factors do not seem to be related to organic food purchase based on past studies presented above. Furthermore, Steptoe et al. (1995, 267-284) insist that the scales in their food choice questionnaire are highly reliable and strongly correlated to one another. Therefore, it is possible to compile the determinants into a smaller number of factors, which are influential and easier for analysis.

Question layout directly influences the quality of responses. An unclear and complex structure may cause confusion for respondents, leading them to answer the wrong questions. Each question should be clearly separated. Similarly, in multiple-choice questions, there should be ample space in the intervals among several response alternatives. This arrangement probably enhances ease of reading and reduces the probability of choosing the wrong answers. The breakdown of questions into smaller sections with relevant sub-headings is favorable for respondents. Before encountering with a new section, respondents know the general topic of the next set of questions according to the sub-heading. Grouping several questions helps respondents follow the questionnaire easily and realize the connection between sections. (Brace 2008,142.)

In this questionnaire, questions are divided into five sections. A progress bar is positioned at the end of each section, indicating the completed percentage of the filling-in process to respondents. The progress bar also gives respondents the sense of accomplishment when finished a section (Brace 2008,142 & 152).

The first draft of questionnaire is produced with the emphasis on its appearance. Obviously, an attractive and well-design questionnaire gives respondents interest and excitement. Conversely, a cursory questionnaire may cause respondents some doubt about the seriousness of the survey and the researcher professional skills, resulting in a low response rate. (Naval 2011, 86.) In this study, both web-based and paper questionnaires are thoughtfully prepared. They are embedded with the K-citymarket logo, Christmas-related themes and icons, which are expected to earn trust and attract respondents. In addition to the

design, the printing paper is of high quality. The appearance of a questionnaire plays the key role in creating positive feelings for respondents.

4.3 Post-construction

The last phase of the questionnaire design process is the post-construction phase, including four steps. The first one is the pre-testing of the questionnaire, followed by the second pre-testing, which depends on the feedbacks obtained in the first step. The third step is to revise the draft and finalize the questionnaire. Finally, researchers administer the questionnaire and collect responses.

Pre-testing of the questionnaire ensures that respondents understand the questions and give the relevant answers. (Naval 2011, 74.) Due to the fact that the questionnaire is probably compiled by experts, a question might be totally comprehensible for the experts, while being confusing for some respondents. In order to test the questionnaire clarity, 10 random K-citymarket customers are randomly approached and given the questionnaire. Those customers are asked to complete the questionnaire. Then, they give their impression and opinions about the question contents, question order and other related aspects as discussed above.

Depending on the feedbacks obtained in the first pre-testing, **second pre-testing** might be administered if necessary. There is always room for improvement as designing a questionnaire is an iterative process (Parasuraman et al. 2007, 283). Thus, the pre-testing phase could be repeated until the questionnaire reaches the best version.

Revising the questionnaire is the third step. The draft of the questionnaire is thoroughly edited according to the feedbacks obtained in the pre-testing (Naval 2011, 88). Several changes in the draft could be made such as adjusting the font size, changing the order of questions, replacing ambiguous words and so on. Up to this point, the final draft of the questionnaire is ready for launch.

Administration of the questionnaire and acquisition of responses are included in the last step of the post-construction phase, in which researchers collect

responses and interpret the obtained data by using an appropriate technique (Naval 2011, 88). In this research, a statistical analysis program is utilized to manipulate the respondent information and subsequently deliver the results. Respondent inputs are extracted from the web-based questionnaire. Meanwhile, regarding the paper questionnaire, respondent inputs have to be manually inserted into a file which is compatible with the statistical analysis program. This process is called data entry, which requires a considerable amount of time and accuracy (Brace 2008, 146). In addition to the data entry, the Finnish answers to open-ended questions need to be translated into English carefully in order to retain the original meaning of the answers. Besides a well-designed questionnaire, a proper administration of the questionnaire will reap accurate and reliable responses.

Chapter 4 presents the systematic process of designing a questionnaire, including three phases: pre-construction, construction and post-construction. Each phase involves several sub-steps correlating with one another. Thus, when researchers aspire to an effective questionnaire, they should not overlook but adhere to every single step in this systematic process rigorously.

5 EMPIRICAL RESEARCH

The previous chapter elaborates on the questionnaire design process, which is the basis for this research. The following sub-chapters describe the holistic picture of the data collection process. Most importantly, the respondent information is rigorously compiled and analyzed by using a statistical analysis program.

5.1 Data acquisition process

As stated above, the primary data is gathered from interviews and surveys. The data collection process is illustrated in the figure below.

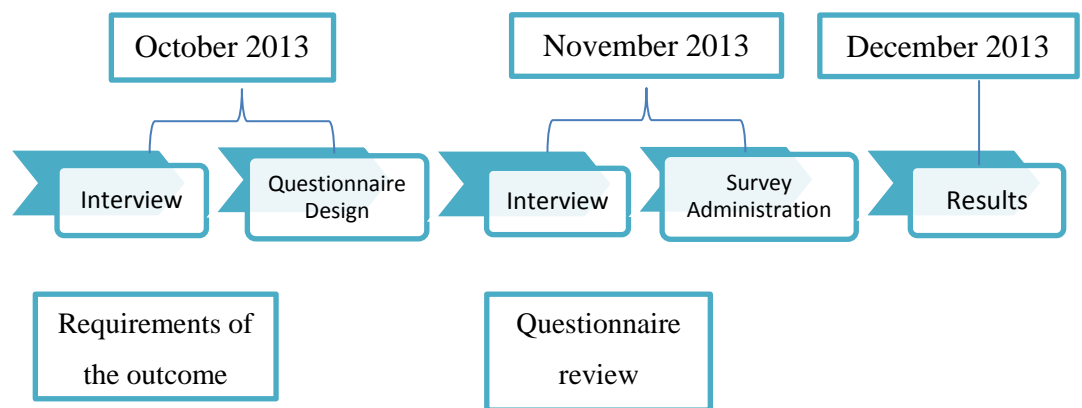


FIGURE 13. Data acquisition process.

In the early stage of the data collection process, it was necessary to have some interviews with the K-citymarket representative in order to gain further research information. In the first interview, the representative stated that K-citymarket targeting a group comprises people aged from 35 to 65, married couples and retirees (Laaksonen 2013). The author was given detailed data of the fast-selling and stagnant organic products. The data was carefully recorded for the empirical

study. In the next interview, an open discussion about data requirements was conducted. The representative expressed the expectations of the research results and in turn, received the author explanation for the limitation of statistical techniques. The harmonization between K-citymarket expectations and the author abilities helped to narrow down the scope of this research. Then, the author composed a questionnaire and revised it several times with the generous support of the thesis supervisor. In the final phase, the K-citymarket representative reviewed the questionnaire to assess whether it fulfilled their requirements. After three interviews, the questionnaire was finalized and ready to be utilized.

The survey administration comprised two main parallel phases: web-based survey and paper survey. The online survey was published by the K-plussa service company, which has the email addresses of the K-citymarket customers. The timescale for the questionnaire were 2 weeks and all the data was collected on December 2, 2013.

In November 2013, the paper survey was conducted by a research team including the author and a Finnish student in K-citymarket Oy Paavola in Lahti. Thanks to the K-citymarket generous support, the team members were provided with the K-citymarket working uniforms in order to earn customer trust. An information table was placed closely to the organic food shelves. This selected location was expected to attract interested customers easily. The survey introduction and instruction were distributed in paper form, assisting customers in answering the questionnaire. The paper survey is more advantageous than the web-based survey in a way that customers are able to ask the author for further clarification. In addition, paper survey is favorable for customers who cannot be reached by emails, for instance, elderly people. Organic chocolate bars were used as incentives to motivate participation.

5.2 Data analysis

The data collected from the survey are manipulated and analyzed in this sub-chapter in order to answer the research questions. There are 614 responses but 613

are usable, because one response was abandoned. The high response rate might signal that a large number of customers are interested in organic foods. The obtained data are analyzed by running descriptive statistics, independent sample t-test, Chi-square test and multiple regression analysis. The two subsequent chapters show the analysis of the classification information and the basic information of the questionnaire.

5.2.1 Classification information

This sub-chapter reveals the classification information and the respondent purchasing patterns. The classification information refers to the demographic data of the respondents such as age, gender, income, education, employment status and so on. Purchasing patterns are related to the purchase frequency, types of the purchased products and shopping channels.

Demographic Data

The sample is heavily dominated by female respondents, which amount to nearly 70% (n= 419). This result might derive from the fact that women are predominantly the household shoppers; thus, they are experienced in food choices and concerned with foods. When asked about the presence of children in their families, 65.4% answer “Yes” (n=401). A large number of the respondents having children in the household could be linked to the reasons for organic food purchasing. In the sample, there are only eight respondents aged below 20. Thus, the author decided to combine the group aged below 20 and the group aged between 21 and 30 into a new group called “Below 30 years old”. Figure 14 displays the age distribution of the respondents.

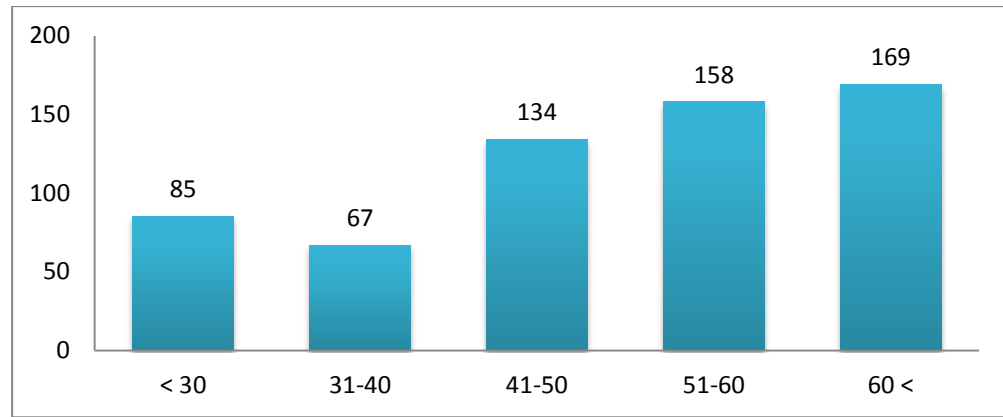


FIGURE 14. Age distribution of the respondents

Overall, the age range distributes widely and skews to the right side of the chart. The majority of the respondents are above 41 years old (over 75.4%, $n=461$), only around 10.9% ($n=67$) aged between 31 and 40 and 13.9% ($n=85$) are below 30 years of age. As can be seen clearly in the figure, a large proportion of the respondents are above 41 years old. This group ideally falls into the K-citymarket target segment, which comprises people aged between 35 and 65.

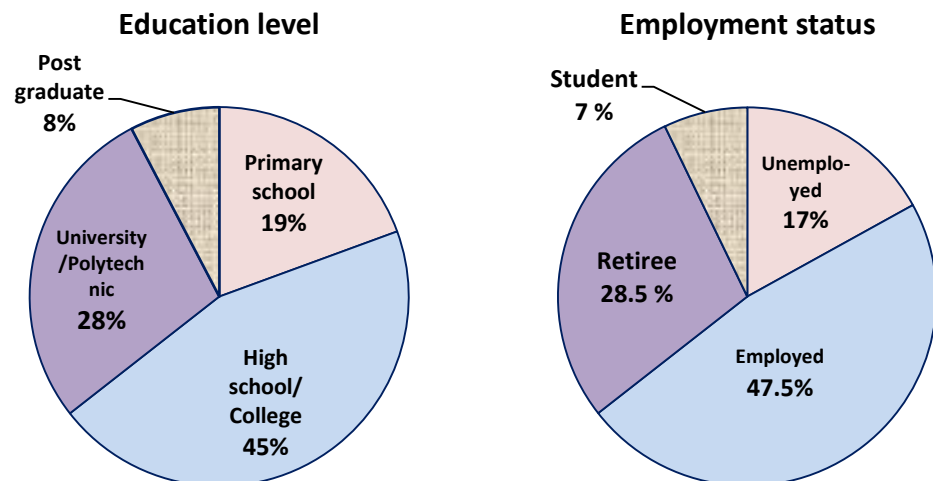


FIGURE 15. Demographic data of the respondents

In Figure 15, the pie charts break down the respondent information by the education level and employment status. Regarding the education level, nearly half of the respondents have high school or college degrees (45%). Only 47 respondents have the post-graduate degree, which account for nearly 8%. Concerning the employment status, the employed respondents amount to nearly half the total (47.5%) while the unemployed respondents are merely 17%. The pie chart also shows that almost a third of the respondents are retirees while only 7% are students. The dominance of employees and retirees might result from the majority of the respondents are at the working and retirement age, meaning above 41 years of age (over 75.4%).

TABLE 1. Respondent monthly income in Euro (include subsidies)

Unit in Euro	n	%
< 500	24	3.9%
501-1,500	231	37.7%
1,501-2,500	190	31.0%
2,501-3,500	122	19.9%
3,501-4,500	27	4.4%
4,500 <	19	3.1%
	613	100 %

Table 1 provides the data of the respondent monthly income including subsidies. With a quick look, most of the respondents have monthly income ranges from 501 Euro to 2,500 Euro (over 60%). Only a few respondents earn more than 3,500 Euro per month (7.5%). In short, the monthly income is not evenly distributed among the respondents.

Purchasing Patterns

Regarding the frequency of purchasing organic foods, only 9.1% of the respondents have never bought organic foods before (n=56). Seemingly, organic foods have become popular among the respondents. About 41% of them buy

organic foods few times a year (n=253). The respondents who buy organic every 2 to 3 week account for 34.9% (n=214), and those buy organic foods every week and many times a week account for 12.4% (n=76) and 2.3% (n=14) respectively.

The author decided to divide the respondents into two groups based on the purchase frequency. Those who never and rarely buy organic foods are grouped into one group called infrequent consumers. This new group amounts to 50.4% of the respondents. The rest is grouped into one group called frequent consumers. Since the number of infrequent and frequent buyers is almost equal, it is possible to draw a comparison between two groups in certain dimensions later. The detailed frequency of purchase and division of the respondents into two groups are showed in Table 2.

TABLE 2. The frequency of organic food purchases

	n	%	
Never	56	9.1%	} Infrequent consumers 50.4%
Few times a year	253	41.3%	
Every 2-3 week	214	34.9%	} Frequent consumers 49.6%
Every week	76	12.4%	
Many times a week	14	2.3%	
	613	100 %	

The respondents who buy organic foods are asked to answer a separate set of questions. Firstly, the respondents select their preferred shopping channels for organic foods from among supermarkets, opened markets /farmers and specialty stores. Supermarkets are the most common shopping channels (n=362), followed by opened markets/farmers (n=240). Specialty stores are the least preferred places for buying organic foods.

TABLE 3. Shopping channels for organic foods

	n
Supermarkets	362
Farmer markets	240
Specialty stores	118

A list of nine common organic products is compiled from previous studies and the K-citymarket representative information. Due to the limited length of the questionnaire as well as the indefinite response choices, a blank is placed at the end of the question. Therefore, the respondents can fill in their purchased organic products, which are not on the list.

TABLE 4. Types of purchased organic foods

	n
Fruits and vegetables	351
Bread, cereals/bakery products	244
Honey	181
Dairy products	142
Meat/minced meat	138
Olive oil	94
Tea	88
Eggs	72
Juice	63

From the data in Table 4, it is apparent that the majority of the respondents buy organic fruits and vegetables. The result is consistent with previous studies. The other popular organic products are breads, cereals, honey, dairy products and meat/minced meat. The rest including organic olive oil, tea, eggs and juice are less purchased. Besides, several respondents also buy other organic foods such as ketchup, dry fruits, chocolate bars and so on. Notably, four respondents buy organic cosmetics produced without animal testing, showing their concern for animal welfare. It can be concluded that some respondents consider ethical

attributes when buying organic foods. The list of most purchased organic foods might assist the case company in selecting the major categories for organic foods.

Then, the respondents are asked to grade from 1 to 5 based on the extent to which they favor Pirkka organic products. The average score is 3.73, indicating that the respondents are concerned for the product labels. Notably, a respondent asserts that his preference for Pirkka organic products depends on the country of origin. Overall, a considerable number of the respondents draw attention to the label of organic products.

5.2.2 Basic information

As indicated in sub-chapter 4.2, basic information is used to answer the research questions. In this sub-chapter, six issues are investigated by conducting SPSS statistical program. Firstly, the difference between two groups of buyers in their viewpoints on organic foods is examined. Then, the relationship between respondent demographic data and the purchases of organic foods is revealed. Thirdly, the importance of each criterion for organic food choices is assessed according to the scores rated by the respondents. After that, a generalization technique will be conducted to transform numerous criteria into a smaller number of factors. These underlying factors are the utmost importance of organic food choices, thus, they probably affect the purchases of organic foods. The fifth issue is the influence of those major factors on the frequency of organic food purchases. Last but not least, the hindrances to buying organic food products are discussed.

1. Frequent and infrequent buyers are different in their viewpoints on organic-food related issues

The opinions on organic foods of two groups are explored based on their answers to a set of six statements. The respondents rate the extent to which they agree or disagree with the statements, ranging from “strongly disagree” (1) to “strongly agree” (5). Independent sample T-test is used to compare the mean scores rated by the two groups of buyers. The results are provided in the table below.

TABLE 5. General attitudes towards organic foods between two groups

Statements	Infrequent buyer	Frequent buyer	Sig.
	Mean scores/Opinion	Mean scores/Opinion	P
The price of organic foods is high	4.26	4.09	0.04
	Strongly agree	Agree	
I trust in organic food quality/certification	3.11	3.61	0.00
	Agree	Agree	
Organic foods are better than conventional foods	3.00	3.76	0.00
	Neutral	Agree	
I am willing to pay more for organic foods	2.43	3.36	0.00
	Disagree	Agree	
I will buy organic foods that many people buy	2.46	2.52	0.43
	Disagree	Disagree	
Organic foods are difficult to find	2.75	2.77	0.80
	Disagree	Disagree	

As can be seen from the data in Table 5, there are significant distinctions between two groups in their opinions on price, trust, organic food quality, and the willingness to pay ($p < 0.05$). Despite both groups concede that organic foods are high-priced products, infrequent buyers agree more than frequent buyers. Concerning organic quality, frequent buyers affirm that organic foods surpass conventional foods and strongly believe in organic quality claim. Consumers recognizing “Worth-the-purchase” are motivated to continue buying, and even are willing to pay higher prices for organic food quality. Unlike frequent buyers, infrequent buyers show no explicit opinion on the difference in quality between conventional and organic foods, meaning they neither experience nor recognize the premium quality of organic foods. Lack of perceived value discourages infrequent buyers to spend more on organic foods, not to mention the high price. Still, infrequent buyers trust in organic food quality indicated on the label. Regarding social influence and availability of organic foods, both groups show no significant distinction ($p > 0.05$). The respondents appear to be independent shoppers, as they do not tend to purchase organic foods that most of the others

purchase. In general, organic foods are widely accessible and relatively easy to find for both groups.

Overall, the respondents hold a positive viewpoint of organic food quality. Despite the high charges, frequent organic buyers are motivated by the recognition of organic food benefits. In contrast, infrequent buyers neither perceive organic food value sufficiently nor afford for organic foods. High price and lack of sufficient perception are the hindrance to buying organic foods. The findings are in line with previous studies.

2. The relationship between demographic traits and organic food purchasing

In this sub-chapter, the relationship between the respondent demographic data and their purchases of organic foods will be examined. Chi-square test for independence assesses whether two variables are related to each other (Pallant 2010, 217). There are two noteworthy relationships are detected by using the Chi-square test.

The relationship between two variable “Two groups of buyers” and “Employment status” is statistically significant ($p=0.007 < 0.05$). The detailed result of the Chi-square test is provided in Appendix 1. The description of the relationship is illustrated in the figure below.

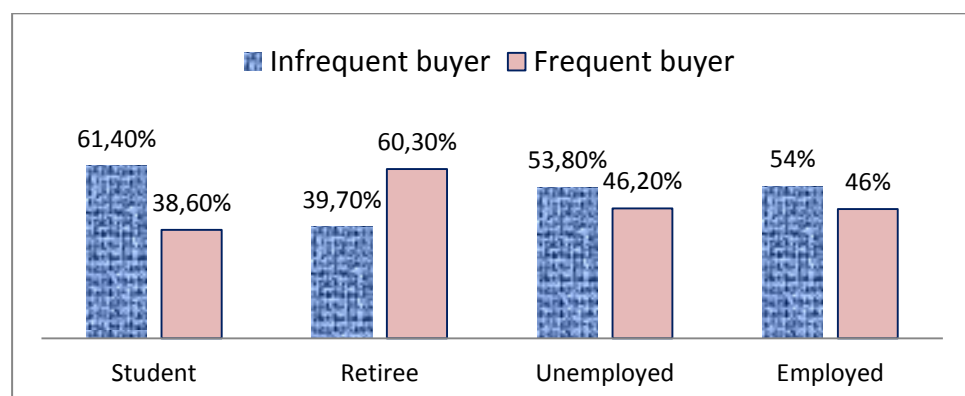


FIGURE 16. Respondent employment status and organic food purchasing

From the data in Figure 16, it can be concluded that there is a distinction between retirees and students. The majority of students buy organic foods infrequently (61.4%). In contrast, most of the retirees buy organic foods on a regular basis (60.3%). About half of the unemployed and employed respondents buy organic foods infrequently. In brief, the retirees are more likely to buy organic foods than students.

The relationship between variable “Two groups of buyers” and variable “Age” is also statistically significant. ($p=0.002<0.05$). The detailed result of the Chi-square test for this relationship can be found in Appendix 2.

TABLE 6. The relationship between age and the purchase of organic foods

Years old	Infrequent buyer	Frequent buyer
< 30	61.2%	38.8%
31-40	56.7%	43.3%
41-50	58.2%	41.8%
51-60	46.8%	53.2%
60 <	39.6%	60.4%

Table 6 reveals that about 61.2% of the respondents aged below 30 are infrequent buyers of organic foods. Meanwhile, respondents aged above 60 years old are interested in buying organic foods and 60.4% of them are frequent buyers. In general, since the age of 51, respondents start to buy organic foods more regularly. The increase in the frequency of organic food purchases might result from the fact that elderly consumers are risingly conscious of health.

The Chi-square test indicates no association between the education level and the frequency of organic food purchasing ($p=0.238 > 0.05$). The result is different from those of several previous studies, which prove that high-educated consumers buy organic foods more frequently. This difference may derive from the dominance of consumers whose high school or college degrees. Besides,

consumer monthly income is also unrelated to the purchase frequency of organic foods ($p=0.08>0.05$). Unlike the results of past studies, in this case, high income does not lead to high consumption of organic foods. As stated above, a large percentage of the respondents having children to support could likely to have an effect on the purchase frequency of organic foods. However, the Chi-square test shows no significant association between the presence of children in the household and the purchase of organic foods ($p=0.051>0.05$). The summary of three Chi-square test results is provided in Appendix 3, 4 and 5.

In general, frequent organic buyers are predominantly retirees and people aged above 51. As proved above, income, education and presence of children in the household do not significantly influence the purchase of organic foods.

3. The purchase criteria for organic foods

As presented in the preceding sub-chapters, frequent and infrequent consumers are different in their demographic backgrounds and their own opinions about organic foods. Thus, it is likely that they have their own purchase criteria for organic foods. In order to satisfy organic food consumers as well as motivate inorganic food consumers, it is essential to comprehend their common requirements for organic foods. This sub-chapter aims to discover the vital criteria for purchasing organic foods. All respondents are asked to rate the importance of each criterion for the organic foods that they will buy. The scale points range from 1 to 5, in the ascending order of degree, meaning from “not important” to “very important”. Table 7 provides the variable information and variable mean scores.

TABLE 7. Mean scores of the criteria for organic food products

	“The organic food products I will buy should”	Mean score	Avg. mean
Health	Contain a lot of vitamins	4.07	4.20
	Be nutritious	4.33	
Ethical concerns	Be produced in a way that is good for the environment	3.99	3.99
Sensory appeal	Look fresh	4.40	3.54
	Taste good	4.34	
	Have a pleasant texture	4.02	
	Be what I usually eat	3.37	
	Be familiar with me	3.15	
	Have a nice packaging	1.95	
Social influence	Be the organic foods that family/friends usually buy	2.47	2.47
Price	Be good value for money	4.18	3.67
	Not be very expensive	3.16	
Trust	Be produced from local/nearby places	3.83	3.72
	Be imported from countries that I know	3.59	
	Have a reliable organic brand/label	3.75	
Availability	Be easy to find in the supermarkets/shop	3.82	3.42
	Be quick to prepare	3.04	

Based on the list of determinants of food choices provided by Stepto et al. (1995, 267-284), 17 variables are categorized into seven criteria including health, sensory appeal, ethical concerns, social influence, price, trust and availability. For instance, health attributes might be connected with nutrition and vitamin content. The table shows that the average mean score of variable “health” is the highest. The respondents assess this criterion as the most important for buying organic foods. The second most important criterion is connected with ethical issues. The respondents affirm that organic food products should be produced in compliance with environmentally friendly standards. The environment related criterion is

significantly important for Finnish consumers. The Eurobarometer survey (2008) reveals that Finnish citizens have higher willingness to buy environmentally friendly products than other European citizens do. Sensory appeal of organic foods is also important for the respondents, with the exception of packaging. The third important criterion is the taste of organic foods. As can be seen from the data in the table, the criteria “be what I usually eat” and “be familiar with me” have the lower scores than the criteria “taste good” and “have a pleasant texture”. It can be said that the respondents appreciate good taste and freshness more than the familiarity of foods. Presumably, the respondents are eager to try new organic products as long as the taste and texture are enjoyable. It is noteworthy that the respondents are indifferent to the organic food packages as this criterion is the least important than others. Marketers are suggested to pay less attention on designing the packages of organic foods. Regarding external influences, the organic food products, which the respondents will buy, are not necessarily the same as those purchased by their family or friends.

The next criteria for organic foods are related to price, trust and availability, which can be perceived as the hindrances to organic food purchases. When assessing the importance of price, the respondents demand the organic products that are worth the money. The criterion “good value for money” is very important while “not very expensive” is moderately important. It can be said that the prices are possibly negotiated for high-quality organic products to some extent. The origins of organic foods are also very important. The respondents prefer buying organic foods, which are produced locally or imported from well-known countries. Especially, in open answers, several respondents assert that they prefer domestic organic products to foreign ones. A respondent even emphasizes that local foods, whether organic or not, are always better than imported organic foods. As proved above, the frequent organic buyers favor Pirkka-organic foods, meaning the product labels indeed influence the organic food choices. The majority of the respondents express similar concern, as it is very important for them to recognize trustworthy organic labels on the products. With regards to product availability, the respondents desire to spend less time finding organic products in the shopping places. However, they might have time for preparing organic foods, as the criterion “quick to prepare” is moderately important.

By comparing the average mean scores of seven attributes, it is found that the concern for health has the highest point, thus, it is the most important criterion. The following attributes are ethical concerns, trust and price. Sensory appeal and product availability are also crucial for the respondents when considering buying organic foods. The least important criterion is social influences.

4. The generalization of the purchase criteria for organic foods

In this phase, the author aims to reduce the large number of criteria to a smaller one in order to achieve the generalization of the purchase criteria for organic foods. In other words, the underlying factors of organic food purchases that are the most important should be detected. Field (2009, 647) claims that Factor analysis is an effective technique for dimension reduction, thus, it is utilized in this phase. As two variables named “Have a nice packaging” and “Be the organic foods that family/friends usually buy” are negligible, the author decided to remove them from the consumer purchase criteria. The rest are retained to be analyzed.

Prior to running Factor analysis, it is essential to examine the prerequisite for the technique, which is the sufficiency of sample size. Field (2009, 647) presents that a sample of 300 or more is a good and stable sample size. Alternatively, sample size adequacy can be checked by using Kaiser-Meyer-Olkin (KMO) test and Bartlett’s test. The value of KMO greater than 0.5 is acceptable, between 0.5 and 0.7 is mediocre, between 0.7 and 0.8 is good, between 0.8 and 0.9 is great and above 0.9 is superb (Field 2009, according to Hutcheson & Sofroniou 1999, 647). In this case, the KMO value is 0.89, which falls into the range of great. Thus, the use of factor analysis is assuredly appropriate. In addition to the satisfying value of KMO test, the value Bartlett’s test for these data is highly significant and acceptable ($p < 0.001$).

TABLE 8. KMO and Barlett's Test for Factor analysis

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		,890
Bartlett's Test of Sphericity	Approx. Chi-Square	5024,155
	df	136
	Sig.	0,000

The reduction of numerous variables is conducted by using Factor analysis. From 15 variables in the beginning, four variables emerge as the major criteria for organic food purchases. The result is detailed in the table below.

TABLE 9. Simplification of the purchase criteria for organic foods

Pattern Matrix^a				
“The organic food products I will buy should”	Component			
	1	2	3	4
Taste good	0.814			
Be good value for money	0.778			
Not be very expensive	0.728			
Have a pleasant texture	0.641			
Look fresh	0.610			
Be familiar with me		0.881		
Be quick to prepare		0.782		
Be what I usually eat		0.773		
Be produced from local/ nearby places			0.850	
Have a reliable organic brand			0.769	
Be imported from countries that I know			0.733	
Be produced in a way that is good for environment			0.639	
Be easy to find in the supermarkets/shops			0.600	
Contain a lot of vitamins				-0.766
Be nutritious				-0.746

As revealed by Table 9, the criteria strongly correlated to one another are grouped into one factor. The next phase is to name the factor according to the content of the criteria involved. The criteria contained in the first factor all seem to relate to taste and price. Presumably, consumers desire to enjoy organic foods that are their tastes, yet priced reasonably. Factor 1 can be named at “Worth-the-enjoyment”. The second factor is related to the ingestion and the process of organic foods. Thus, Factor 2 might be labeled as “Personal experience of foods”. The third factor comprises the criteria related to “Trust”, “Ethical” and “Availability”. Those criteria are concerning the production and distribution process, which are not clearly verified. Consumers might perceive the organic products to be ethical based solely on the product certification. Hence, Factor 3 can be called “Credible shopping”. The last factor contains two variables regarding the nutrition and vitamin content of organic foods; therefore, this factor might be called “Nutrient content”. To sum up, four major factors are statistically recognized to represent for 15 separated criteria. The subsequent phase will examine if those four factors might influence the purchase of organic foods.

5. The general criteria in the correlation with purchase frequency

Several studies utilize regression analysis to identify the predictors of organic food purchases (Uddin et al. 2008, 25-32; Ahmad & Juhdi 2010, 105-115; Dumea 2012, 107-113). The regression technique investigates the relationship between one dependent variable and a set of independent variables or predictors (Pallant 2010, 148). In this case, the purchase frequency of organic foods depends on the criteria for organic products. Thus, the purchase frequency of organic foods is the dependent variable while the criteria for organic products are the independent variables. The regression technique aims to find the significant factors that could predict the purchase frequency of organic foods. The detailed result of the regression analysis is provided in Appendix 6. The table below shows the factors that contribute to the prediction of the purchase frequency.

TABLE 10. The predictive factors of organic food purchase frequency

Model	Standardized Coefficients	Sig. p
	Beta value β	
Worth-the-enjoyment	-0.128	0.003
Credible shopping	0.277	0.000
Nutrient content	-0.287	0.000
Personal experience of foods	-0.174	0.000

As can be observed clearly from the data in Table 10, the first criterion “Worth-the-enjoyment” has a significant contribution towards explaining the variation of the purchase frequency ($p=0.003<0.05$). Similarly, “Credible shopping” is found to have a significant effect on the purchase frequency, meaning consumers who are more concerned about ethical products tend to increase their purchase frequency of organic foods ($p<0.05$). Besides, the availability of organic products could influence organic food purchases, as this criterion belongs to the factor “Credible shopping”. The importance of the “Nutrient content” of organic foods is also statistically proved to affect the purchase frequency. The more nutrition-conscious consumers are, the higher probability of their organic food purchases will be. Consumer experience of organic foods also influences the purchase frequency significantly. ($p<0.05$)

Table 10 also presents Beta value, which indicates the contribution of each independent factor to the prediction of the purchase frequency. When using the Beta value, it is suggested to ignore the minus sign in front of the Beta value. In other words, only the absolute value of the Beta value is considered. (Pallant 2010, 161.) Accordingly, the factor “Nutrient content” ($\beta=0.287$) is a more important predictor of organic food purchases than “Credible shopping” ($\beta=0.277$). The result can be said that consumers more concerned about the nutrient contents of foods tend to buy organic foods more frequently. With the highest Beta value, “Nutrient content” makes the strongest contribution to the prediction of the organic food purchase. “Personal experience of foods” is also found to be a significant predictor but with a lower probability (lower Beta value). It is surprising that “Worth-the-enjoyment” makes less of a significant

contribution to the prediction of the organic food purchase in comparison with the remaining factors. This result may derive from the overlap among independent variables in the model (Pallant 2010, 161). Overall, all four factors are statistically confirmed to be the significant predictors of the purchase frequency of organic foods.

6. Hindrance to purchasing organic foods

After understanding the consumer expectations of organic foods, it is necessary to eliminate the remaining obstacles to organic food purchases. Eventually, organic foods are expected to be accessible to consumers.

Why do you rarely (or never) buy organic foods? (Tick any if applied)

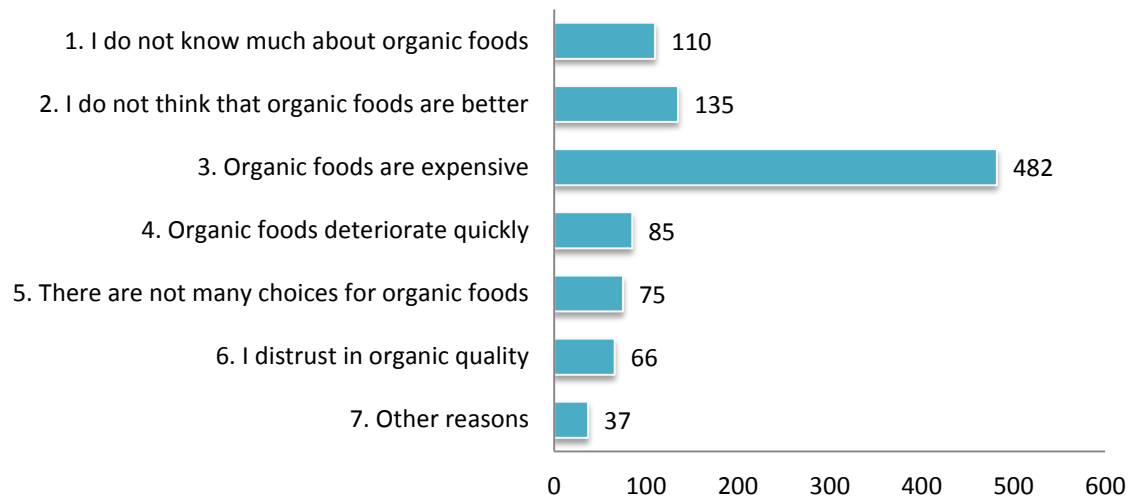


FIGURE 17. Responses regarding obstacles to organic food purchases

As revealed by Figure 17, the first data worth noting is that high price is the biggest obstacle to buying organic foods. This reason is nearly 4 times higher than the others. Up to this point, high price is confirmed to be the major hindrance to infrequent buyers. In the open answer, consumers further desire that organic food products should be at a discount more frequently. Thus, they could try or increase buying organic foods.

The second biggest reason is related to the insufficient perception of organic food value, which is described by three statements: “I do not know much about organic

foods”, “I do not think that organic foods are better” and “I distrust in organic quality”. Generally, the respondents do not recognize the premium value and consider organic foods as deceptive advertisements. Consequently, they are not motivated to buy or continue buying. A respondent concedes that he/she is disappointed at the taste of organic foods while another respondent think that organic and conventional foods are similar. Especially, a respondent allergic to unfamiliar foods asks whether organic foods are safe to eat. Therefore, the lack of knowledge and perceived value of organic foods hold back respondents either to make entry into buying or continue buying.

The third biggest discouragement is that organic products are also perceived to be perishable. The respondents hardly find organic food products in “good condition”. Further, a respondent cites that it is difficult to store organic food products, as they are highly vulnerable to the external environment.

Another obstacle is related to the product range. The limited varieties of organic food products discourage respondents. A respondent complains that organic product range is not diversified. Furthermore, another respondent states that is not able to find his/her desirable organic products in the supermarket. In an open answer, a respondent notes that he/she is seeking for organic beef, which is sold in large quantities, 20 kg.

Two reasons are cited by a handful of the respondents, which are described as follows. The first one is related to habitual shopping, meaning that the respondents tend to keep buying the same conventional foods. They are not eager to try new organic foods as it might take them extra time and effort. Secondly, some respondents grow their own foods that they perceived to be organic and of reliable quality. Several answers are surprising but are cited by single respondents. Thus, these answers are negligible.

By using a statistical analysis program, chapter 5 analyzes the data obtained from the questionnaire thoroughly. As a result, several findings are delivered. In the next chapter, these are examined in order to know if they answer the research questions.

6 DISCUSSION AND CONCLUSION

Consumers are selecting organic foods corresponding to their needs and wants, which is a sophisticated process. Capturing the essence of consumer preferences for organic foods requires an appropriate technique and extensive research knowledge.

This study aims to assist the case company in understanding consumer selection and purchasing patterns towards organic foods. The results in previous chapters as well as suggestions for further research will be discussed in this chapter. Most importantly, the recommendations about marketing strategies are also introduced.

6.1 Findings

The research undertakes a combination of qualitative and quantitative methods, of which the latter is prevailing. The data used in the empirical part is collected by means of self-completion surveys in web-based and paper form. The process of gathering the case company requirements, designing the questionnaire and collecting responses lasted for 3 months. This research requires extensive literature review of past studies to collate the determinants of buying organic foods, and the implementation of a questionnaire to verify consumer criteria for selecting organic foods. The analysis of the obtained data is presented in details in Chapter 5. Next, the results are reviewed in order to know if they answer the research questions.

To start with, the list of five sub-questions in the research objective is restated and the answers to those questions are explained.

1. How have organic farming and organic foods prevailed recently?

The detailed presentation of organic farming development and its core principles is covered in Chapter 2. Other significant issues revolving around organic foods are also demonstrated. In brief, organic farming is exposing its superior value and is considered as an ideal farming method for sustainable living. Similarly, organic

foods are capturing conscientious customers who pursue healthy lifestyles and care about the future generation. The growing awareness of environmental issues has elevated the organic food growth and involved producers in ethical manufacturing. Driven by consumer demand, producers are increasingly making transitions to organic farming and facilitating the supply of organic foods.

2. *Why are consumers buying organic foods? What induces them to buy?*

Although the answers to these questions mainly rely on the results of past studies, the opinions of frequent organic buyers in Chapter 5 partly reaffirm that the concern for health is the strongest motivation for organic food purchases. Consistent with previous studies, consumers hold a positive image of organic foods in general. They believe in genuine organic quality and perceive organic foods to be healthier than conventional substitutes. Consumers also state that they are avoiding the risks of residues in conventional foods. Thus, they are buying organic foods to reap the health benefit.

3. *On the other hand, what could hinder customers from purchasing organic foods?*

In the findings, high price is cited as the single biggest barrier to buying organic foods, followed by, in order, the lack of perceived value, the fast deterioration of quality and the limited product range. The results are consistent with previous studies. Not surprisingly, high price discourages new consumers and deters the current consumers from increasing in spending on organic foods. The insufficient perception of organic value is the second biggest obstacle. The remaining reasons for non-purchase of organic foods are varied and insignificant. In brief, high price and the lack of perceived value are the dominant hindrances to potential consumers.

4. *What is the relationship between consumer demographic characteristics and their purchasing patterns towards organic foods?*

The statistical results lead to the conclusion that consumer demographic characteristics closely link to organic food purchasing. The majority of organic food consumers are female and people aged above 51. Women are predominantly

the main household shoppers while elderly people are deeply concerned about health. Thus, they are the prospective organic food consumers. As evidenced by the results, education, income, and the presence of children in the household are unrelated to the tendency to buy organic foods. Surprisingly, the level of education has no effect on organic food purchasing. Whereas, past studies indicate that high-educated consumers are inclined to buy organic foods more frequently. The study also demonstrates that retirees are frequent buyers of organic foods while students are infrequent buyers. The results might suggest that the concern about healthy foods is the driving force for organic food purchasing regardless of income or education.

5. *What are consumer criteria for selection of organic foods? Among them, what determinants matter most?*

Given the broad range of seven possible determinants of organic food selection, healthy attribute is proved to be the strongest influence, followed by, in order of importance, ethical concerns, trust, price, sensory attributes and availability. The second important criterion is the ethical concerns. Consistent with past studies, consumers are increasingly paying high attention to ethical issues. They are buying organic foods in support of the environment, animal welfare and fairness for farmers. Thirdly, trust is another criterion. Consumers desire to buy organic foods originating from reliable origins. Further, they appear to favor domestic organic foods exceptionally. It can be said that consumers in developed countries, for example, Finland, have the patriotic preference for organic foods. This trait is hardly found in developing countries, where consumers tend to prefer imported products (Uddin et al. 2008, 25-32).

Price is the fourth important criterion despite the fact that high price is the biggest obstacle to buying organic foods. This surprising result implies that the price of organic foods could still be negotiated. If consumers recognize organic foods to be worth buying, they might accept the high level of price. Sensory attributes and product availability are also proved to be influential criteria. Among several sensory attributes, taste is the most important factor. It is a fact that taste brings pleasant experience to foods, and makes the eating enjoyable. Thus, consumers highly appreciate the taste and even accept the unattractive appearance of foods in

some cases. Furthermore, product availability is a crucial factor for organic food purchases as consumers expect to save time and effort during shopping.

It is discovered that consumers choose their foods independently. They are not likely to buy the organic foods that other people buy, including the products that their family members or friends buy. Surprisingly, consumers are indifferent to the packaging of organic products, which is also connected with sensory attribute.

Up to this point, every sub-question is answered. The main research question is also fulfilled, which is “What are consumer purchase criteria for organic foods?”. The health benefit is the utmost importance in consumer criteria for organic foods, followed by, in order, ethical concerns, trust, price and other discussed criteria. High price is cited as the biggest obstacle to buying organic foods. Consumer demographic characteristics are deeply related to their organic food choices. The results also demonstrate that consumers are shopping for organic foods independently corresponding to their own needs. Besides, the packaging of organic food products is of little importance to consumers.

Extra findings

After the important criteria for organic food purchases are clearly identified, the study is about to be concluded. However, the study aspires to discover consumer selection of organic foods to a greater degree. It is a fact that when a product meets an important criterion, it does not necessarily lead to an actual purchase. However, another fulfilled criterion might result in the decision to buy organic foods. During the data analysis process, the author discovered the strong relationship between the purchase criteria and the purchase frequency of organic foods. By using statistical techniques, the results are proved to be accurate and reliable.

From the several initial purchase criteria, four major factors are compiled, which are named “Worth-the-enjoyment”, “Credible shopping”, “Personal experience of foods” and “Nutrient content”. They are statistically significant indicators of organic food purchases, that is; these four factors can be used to predict whether consumers decide to buy organic foods more frequently. This outcome could

supplement the above results regarding the important criteria for organic food purchases.

Figure 18 below displays the four predictors of organic food purchase frequency as well as the prospective consumer segment.

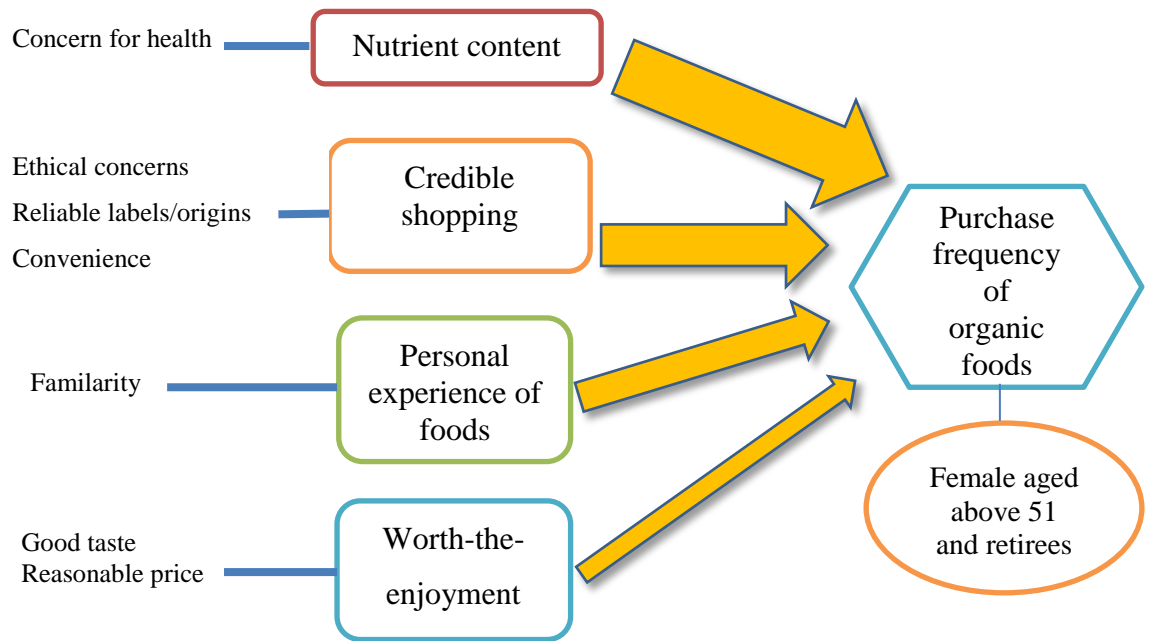


FIGURE 18. Four predictors of organic food purchase frequency

As can be seen in Figure 19, the degree of predictive power of each factor is indicated by the line weight. Accordingly, “Nutrient content” is the most predictive factor, followed by, in descending order, “Credible shopping”, “Personal experience of foods” and “Worth-the-enjoyment”. The author claims that four factors are useful for decisions on marketing strategies related to organic foods. The suggestions for marketing managers are presented below.

Managerial implications

From the author viewpoint, the findings are a supportive source for marketing managers. They may segment consumers on the basis of age, gender and

occupation in order to formulate effective marketing strategies correspondingly. According to the results, frequent organic food consumers are consumers aged above 51, and are either female or retirees. Marketing managers are suggested to provide a greater amount of organic food products, which are favorable for women and elderly people.

The findings indicate that consumer information on organic foods is still ambiguous and insufficient. Therefore, the initial ideal step is to convey appealing and communicative messages. Fresh appearance, good taste, reasonable price and health benefits are likely to tempt new consumers into organic foods. In order to retain the current consumers, the messages should strongly underline the superior quality of organic foods and ensure that consumers remain their willingness to pay for a premium price. As proved above, the factor “Nutrient content” has a significant effect on organic food purchases. Marketing managers might highlight the health benefits of organic foods in anticipation of more organic food consumers.

Another important task is to provide consumers extensive knowledge of how to differentiate organic food products on the market. Apparently, consumers are not able to distinguish particular features of organic foods from that of conventional alternatives. Consumer misconception of organic foods even further causes the confusion over product labels. This shortage of knowledge may lead to the selection of unhealthy foods or the avoidance of unfamiliar but healthy foods, as consumers are incompetent to make appropriate decisions. Thus, the author suggests that detailed information on organic foods should be widespread and accessible. Well-known and reliable labels possibly persuade infrequent organic and skeptical buyers into organic quality.

Besides the concern for personal benefits, consumers aspire to contribute to society benefits. Marketing managers are suggested to underline that organic foods are, either in direct or indirect ways, associated with the advantages for the environment, animal welfare and farmers. It can be said that organic foods are more than just the product itself. The crucial role of organic foods in contributing to the sustainable living should be well-known among consumers. The results also reveal that consumer perception of product quality is deeply affected by the

country of origin. Specifically, they strongly favor supporting local businesses. Regarding this aspect, the case company may emphasize on promoting domestic organic foods in addition to Pirkka organic products.

Marketing managers might strive to place organic foods within the reach of consumers; that is, consumers can easily find their desirable products when necessary. A couple of strategies are proposed such as placing organic products at the eye level, marking them with noticeable tags or signs, lightening the display and so on. Convenient product locations probably encourage consumers to renounce their habitual shopping, and try new products without sacrificing much time and effort. Further, marketing managers in corporation with distributors and producers may strive to maximize the diversity of organic products, instead of investing in fancy packaging.

6.2 Further research

The author believes that the results are promised to be deepened and widened by future market research. A couple of organic-food related issues are not included in the empirical research due to the limited timescale for the survey.

This study does not fully investigate consumer opinions about residues and GMOs. Previous studies conclude that the fear of pesticide residues and GMOs influences consumer purchases of organic foods. Consumers attempt to avoid residues and GMOs at any costs. The author anticipates that future research can prove the impacts of residues and GMOs on organic food purchases by using statistical techniques.

The extent to which consumers are willing to pay for organic foods is not detailed in this study. The author is intrigued to know how consumers weigh costs and benefits when choosing organic foods. It is worth emphasizing that consumer willingness to pay is certainly of great interest to suppliers, as it influences pricing strategies directly. Future studies are expected to be carried out early, assisting organic food suppliers in deciding the appropriate price levels of organic foods.

6.3 Evaluation

As it is the first time the author had the experience in constructing a questionnaire, collecting responses as well as manipulating data by using a statistical program, the author inevitably dealt with countless setbacks. Eventually, the study answered all research questions and the study objective was well achieved. However, in scientific research, it is vital to assess the reliability and validity of the research (Kananen 2011, 125). A thorough and objective evaluation could assure the research quality. The author assesses the results according to the research reliability, internal and external validity.

The reliability of the quantitative research is measured by research consistency and stability (Kananen 2011,125). During this research, one of the primary issues is consistently investigated, which is consumer purchase criteria for organic foods. Thus, consistency of this research is well obtained. Research stability refers to the repeatability of the results when the research is replicated (Kananen 2011,125). The author anticipates that some of the results could be stable over time, for instance, the health benefit is the utmost importance criterion for food choices. Whereas, some criteria, which are proved to be insignificant, are expected to become more influential in the purchase of organic foods in the near future. For example, organic food packages attached with distinctive labels could be more informative and appealing to consumers. Hence, they might increasingly appreciate the packaging of organic food products. The stability of this research is somewhat uncertain. It is a fact that research results are usually subjected to changes over time, and this study is not an exception. Overall, the research reliability is fulfilled.

The internal validity requirement evaluates how well a study is conducted (Kananen 2011,128). The statistical analysis method applied in this research is apparently justified, as it enables researchers to manipulate a large amount of data used for quantitative research. This study exploits various past studies effectively in the light of the research objective. The criteria and variables used in the empirical research derive from past studies, and deliver relevant results. Further, the findings are thoroughly contrasted with those of previous studies in order to

ensure that the research methods are correctly conducted. The internal validity requirement is fully met.

The external validity is an integral part of the quantitative research. It refers to the generalizability of the findings. While qualitative results are confined to the case study only, quantitative results should be possibly generalized. (Kananen 2011, 126 & 138.) Although there is some doubt whether those included in this study are representative of the overall K-citymarket customers, the survey is still expected to reflect the first overview of consumer purchase and selection of organic foods. It is a fact that the studied objects are solely K-citymarket customers. However, the author suggests that the findings could be generalized, as the sample size is relatively large (613 respondents). The other K-retailers located in Finland may refer to this study in order to gain insights into the complexity of consumer purchase of organic foods. Marketing managers could establish product promotions and marketing strategies accordingly. From the author viewpoint, the external validity is highly fulfilled.

7 SUMMARY

This research aims to assist the case company, K-citymarket, in understanding consumer purchase criteria and purchasing patterns towards organic foods. The findings fulfill the research objective and become a valuable resource for other concerned parties in the organic food market. The research comprises four main parts: the overview of organic farming and organic foods, the literature review on consumer purchases of organic foods, the questionnaire design process and the empirical research.

To begin with, Chapter 2 introduces various organic issues in order to underline the social and economic importance of organic farming and organic foods. The current situations of organic production and consumption in prominent markets, namely the European and Finnish market, are subsequently presented. Then, the case company is described in terms of operation and organic product range.

Drawing on past studies, Chapter 3 aims to explore the determinants of organic food purchases. The profiles of organic food consumers are identified. In addition, this chapter discovers the purchasing patterns of organic foods, the motivations as well as the impediments to organic food purchases. The data collated from previous studies helps to compile consumer criteria for organic foods.

Accordingly, the empirical part investigates those criteria in dealing with the complexity of organic food purchases.

Chapter 4 presents the systematic process of designing a questionnaire, including three phases: pre-construction, construction and post-construction. The detailed description of several sub-steps involved in each phase is given. Other researchers could refer to this reliable process when conducting a survey.

In Chapter 5, the collected data is analyzed by utilizing a statistical program. The results are delivered and contrasted with those of previous research. It is expected that some of the results are consistent with past studies while some are different. Finally, Chapter 6 elaborates the findings in order to answer the research questions. It also gives an objective assessment of the study and suggests further research on organic-food related issues, which are intriguing but still unexplored.

REFERENCES

Public references

- Ahmad, S. N. B. & Juhdi, N. 2010. Organic Food: A study on Demographic Characteristics and Factors. *International Journal of Business and Management*. Vol 5 No. 2, 105-115.
- Brace, I. 2008. Questionnaire design: How to plan, structure and write survey material for effective market research. 2nd edition. London: Kogan Page Ltd.
- Coelho, P. S. & Esteves, S.P. 2007. The choice between a five-point and a ten-point scale in the framework of customer satisfaction measurement. *International Journal of Market Research*. Vol 49 No. 3, 313-339.
- Connors, M., Bisogni, C. A., Sobal, J. & Devine, C. M. 2001. Managing Values in Personal Food Systems. *Appetite*. Vol. 3 No. 36, 189-200.
- Curl, C. L., Fenske, R. A., & Elgethun, K. 2003. Organophosphorus pesticide exposure of urban and suburban pre-school children with organic and conventional diets. *Journal of the National Institute of Environmental Health Sciences*. Vol. 111 No. 3, 377-382.
- Darnhofer, I., Roitner-Schobesberger, B., Vogl, C. R. & Somsook, S. 2007. Consumer perceptions of organic foods in Bangkok, Thailand. *Food Policy*. Iss:33, 112-121.
- Díaz, F. J. M., Pleite, F. M., Paz, J. M. M. & García, P. G. 2012. Consumer knowledge, consumption, and willingness to pay for organic tomatoes. *British Food Journal*. Vol. 114 No. 3, 318-334.
- Dimitri, C. & Dettmann, R. L. 2012. Organic food consumers: what do we really know about them?. *British Food Journal*. Vol. 114 No.8, 1157-1183.
- Dodds, B. 2003. Managing Customer Value. Essentials of Product Quality, Customer Service and Price Decisions. Maryland: University Press of America.

- Dumea, A. 2012. Factors influencing consumption of organic food in Romania. *The USV Annals of Economics and Public Administration*. Vol 12 Iss:1, 107-113.
- Duram, L. A. 2005. *Good Growing: Why Organic Farming Works*. Lincoln: Bison Books.
- Field, A. 2009. *Discovering statistics using SPSS*. 3rd edition. London: SAGE Publications Ltd.
- Furst, T., Connors, M., Bisogni, C. A., Sobal, J. & Falk, L. W. 1996. Food choice: a conceptual model of the process. *Appetite*, 247-265.
- Ghuri, P. & Grønhaug, K. 2010. *Research Methods in Business Studies*. 4th edition. Harlow: Financial Times/Prentice Hall.
- González, J. A. A. 2009. Market trends and consumer profile at the organic farmers market in Costa Rica. *British Food Journal*. Vol. 111 No.5, 498-510.
- Gorard, S. & Taylor, C. 2004. *Combining Methods in Educational and Social Research*. 1st edition. London: McGraw-Hill Education.
- Hamzaoui-Essoussi, L. & Zahaf, M. 2012. The Organic Food Market: Opportunities and Challenges. In Reed, M. (ed.) *Organic Food and Agriculture - New Trends and Developments in the Social Sciences*. Crotica: InTech, 63-88.
- Hill, H. & Lynchehaun, F. 2002. Organic milk: attitudes and consumption patterns. *British Food Journal*. Vol. 104 No. 7, 526-542.
- Horne, P. & Page, J. 2008. *Integrated Pest Management for Crops and Pastures*. Collingwood: Landlinks Press.
- Johannsen, J., Wilhelm, B. & Schöne, F. 2005. *Organic Farming: A contribution to sustainable poverty alleviation in developing countries?*. Bonn: German NGO Forum Environment & Development.
- Kananen, J. 2011. *Rafting through the thesis process: Step by step guide to thesis research*. 1st edition. Jyväskylä: JAMK University of Applied Sciences.

- Koivisto, A. 2013. Horticultural production. In Niemi, J. & Ahlstedt, J. (ed.) Finnish Agriculture and Rural Industries. Helsinki: MTT Economic Research, Agrifood Research Finland, 35-39.
- Kraft, F.B., & Goodell, P. 1993. Identifying the health conscious consumer. *Journal of Health Care Marketing*. Vol. 13 No. 3, 18-25.
- Kristiansen, P., Taji, A. & Reganold, J. 2006. *Organic Agriculture: A Global Perspective*. Collingwood: CSIRO Publishing.
- Latacz-Lohmann, U. & Foster, C. 1997. From “niche” to “mainstream” - strategies for marketing organic food in Germany and the UK. *British Food Journal*. Vol 99 Iss:8, 275-282.
- Lockie, S., Lyons, K., Lawrence, G. & Grice, J. 2004. Choosing organics: A path analysis of factors underlying the selection of organic food among Australian consumers. *Appetite*. Vol. 43 Iss: 2, 135-146.
- Magistris, T. & Gracia, A. 2008. The decision to buy organic food products in Southern Italy. *British Food Journal*. Vol.110 No.9, 929-947.
- Magnusson, M. K., Arvola, A. & Hursti, U.K. 2001. Attitudes towards organic foods among Swedish consumers. *British Food Journal*. Vol. 103 No.3, 209-226.
- Mondelaers, K., Verbeke, W. & Huylenbroeck, G. V. 2009. Importance of health and environment as quality traits in the buying decision of organic products. *British Food Journal*. Vol.111 No. 10, 1120-1139.
- Naval, B. 2011. *Business Research Methods*. New Delhi: Dorling Kindersley (India) Pvt. Ltd.
- Niemi, J. 2013. Livestock production. In: Niemi, J. & Ahlstedt, J. (ed.) Finnish Agriculture and Rural Industries 2013. Helsinki: MTT Economic Research, Agrifood Research Finland, 30-34.
- Padel, S. & Foster, C. 2005. Exploring the gap between attitudes and behaviour: Understanding why consumers buy or do not buy organic food. *British Food Journal*. Vol. 107 No.8, 606-625.

Pallant, J. 2010. SPSS Survival Manual. 4th edition. Berkshire: McGraw-Hill Education.

Parasuraman, A., Grewal, D. & Krishnan, R. 2007. Marketing Research. 2nd edition. Boston: Houghton Mifflin Company.

Paul, J. & Rana, J. 2012. Consumer behavior and purchase intention for organic food. *Journal of Consumer Marketing*. Vol. 29 No.6, 412-422.

Rajiv, G. & Marco, V. 2006. The handbook of marketing research: uses, misuses, and future advances. 1st edition. California: SAGE Publications, Inc.

Saher, M., Lindeman, M. & Hursti, U. K. 2006. Attitudes towards genetically modified and organic foods. *Appetite*. Vol. 46 Iss: 3, 324-331.

Saunders, M., Lewis, P. & Thornhill, A. 2012. Research methods for business students. 6th edition. Harlow: Pearson Education Ltd.

Shepherd, R. 1999. Social determinants of food choice. *Proceedings of Nutrition Society*. Iss: 58, 807-812.

Shepherd, R., Magnusson, M. & Sjöden, P.O. 2005. Determinants of consumer behavior related to organic foods. *AMBIO: A Journal of Human Environment*. Vol. 34 No.4/5, 352-359.

Solis, B. 2010. Engage!: The complete guide for brands and businesses to build, cultivate, and measure success in the new web. New Jersey :John Wiley & Sons, Inc.

Solomon, M. 2009. The truth about what customers want. New Jersey. Pearson Education, Inc.

Step toe, A., Pollard, T. M. & Wardle, J. 1995. Development of a measure of the motives underlying the selection of food: the food choice questionnaire. *Appetite*. Vol. 3 Iss:25, 267-284.

Uddin J., Parvin S. & Rahman L. M. 2008. Determinants of purchasing imported products in a regular basis: Development of a Regression Model. *International Journal of Business and Management*. Vol. 3 No. 10, 25-32.

Vogt, G. 2007. The origins of organic farming. In: Lockeretz W. (ed.) Organic farming: An international history. Oxfordshire: CAB International, 9-29.

Zakowska-Biemans, S. 2011. Polish consumer food choices and beliefs about organic food. British Food Journal. Vol. 113 No.1, 122-137.

Electronic references

Benbrook, C. M. 2005. Elevating Antioxidant Levels in Food through Organic Farming and Food Processing. The Organic Center for Education and Promotion [referenced 27 November 2013]. Available at: www.organic-center.org/reportfiles/Antioxidant_SSR.pdf

Bisogni, C. A., Sobal, J., Jastran, M. & Devine, C. M. 2003. Creating food choice dialogues. Food Choice Research Group at Cornell [referenced 25 November 2013]. Available at: <http://www.human.cornell.edu/dns/foodchoice/upload/Bisogni-Creating-Food-Choice-Dialogues.pdf>

Dahlbacka, B. 2011. Finnish Organic Market. MTT's Portal Services [referenced 17 December 2013]. Available at: <https://portal.mtt.fi/portal/page/portal/agronet/luomu/markkinatilanne/B64F98CCF1926C78E040A8C0023C41DF>

Dimitri, C. & Oberholtzer, L. 2009. Marketing U.S Organic Foods: Recent trends from farms to consumers. Economic Information Bulletin. No.58. Economic Research Service [referenced 25 November 2013]. Available at: <http://ageconsearch.umn.edu/bitstream/58615/2/eib58.pdf>

Ellsworth, J. 2001. The History of Organic Food Regulation. Harvard Law School [referenced 10 November 2013]. Available at: <http://dash.harvard.edu/bitstream/handle/1/8889458/Ellsworth.pdf?sequence=1>

European Commission 2013. Organic farming: What is organic farming [referenced 25 November 2013]. Available at: http://ec.europa.eu/agriculture/organic/organic-farming/what-organic_en

European Commission 2013. Organic farming: Logo [referenced 22 November 2013]. Available at: http://ec.europa.eu/agriculture/organic/eu-policy/logo_en

Food Marketing Institute 2008. Natural and Organic foods [referenced 26 November 2013]. Available at: http://www.fmi.org/docs/media-backgroundunder/natural_organic_foods.pdf

Heinonen, S. 2009. Organic Agriculture in Finland 2008. Organic Europe [referenced 27 November 2013]. Available at: <http://www.organic-europe.net/finland.html?&L=0#c2688>

IFOAM 2005. Principles of Organic Agriculture Preamble. International Federation of Organic Agriculture Movements [referenced 24 November 2013]. Available at: http://www.ifoam.org/sites/default/files/ifoam_poa.pdf

Kesko Annual Report 2012 [referenced 2 December 2013]. Available at: http://vuosikertomus2012.kesko.fi/filebank/900-Kesko_Annual_report_2012.pdf

Kesko Food Trade 2013. Divisions Food Trade [referenced 22 December 2013]. Available at: <http://www.kesko.fi/en/Company/Divisions/Food-trade/>

Monk, A., Mascitelli, B., Lobo, A., Chen, J. & Bez, N. 2012. Australian Organic Market Report 2012. Biological Farmers of Australia Ltd [referenced 18 October 2013]. Available at: <http://austorganic.com/Portals/0/Organic%20market%20report%202012-web.pdf>

Organic World 2009. Finland: 19 percent growth of the organic market in 2008 [referenced 18 November 2013]. Available at: [http://www.organic-world.net/news-organic-world.html?&L=1&tx_ttnews\[tt_news\]=138&cHash=dd57cbbcf51405bbebe6e453e7365d68](http://www.organic-world.net/news-organic-world.html?&L=1&tx_ttnews[tt_news]=138&cHash=dd57cbbcf51405bbebe6e453e7365d68)

Oxford Advanced Learners Dictionary 2013. Oxford University Press [referenced 22 October 2013]. Available at: <http://oald8.oxfordlearnersdictionaries.com/dictionary/organic>

Pirovano, T. 2010. U.S. Healthy Eating Trends Part 2 Organic Enthusiasts Remain Loyal. The Nielsen Company [referenced 22 October 2013]. Available at: <http://www.nielsen.com/us/en/newswire/2010/organic-enthusiasts-remain-loyal.html>

Pro Luomu Ry 2013. Organics in Finland 2012 [referenced 9 December 2013]. Available at: http://proluomu.fi/wp-content/uploads/sites/3/2013/10/Organics-in-Finland_2012_final1.pdf

Soil Association 2000. Organic farming, food quality and human health. A review of the evidence [referenced 26 November 2013]. Available at: <http://www.soilassociation.org/LinkClick.aspx?fileticket=cY8kfP3Q%2BgA%3D&%3Btabid=388>

Soil Association 2004. Organic food & farming report 2004 [referenced 3 November 2013]. Available at: <http://www.soilassociation.org/LinkClick.aspx?fileticket=P3MUIvkGhCs=&tabid=116>

Soil Association 2012. Organic market report 2012 [referenced 13 November 2013]. Available at: <http://www.soilassociation.org/LinkClick.aspx?fileticket=5QS24GNSZTA%3D&tabid=116>

The Hartman Group 2008. The Many Faces of Organic 2008 [referenced 6 November 2013]. Available at: <http://www.hartman-group.com/hartbeat/organics-today-who-buying-and-what-next>

The Nielsen Company 2012. A Nielsen Report. Battle of the Bulge & Nutrition Labels. Healthy Eating Trends Around the World [referenced 3 November 2013]. Available at: <http://www.nielsen.com/content/dam/corporate/us/en/reports-downloads/2012-Reports/Nielsen-Global-Food-Labeling-Report-Jan-2012.pdf>

The Soil Association and Sustain 2001. Organic food and farming. Myth and reality. Organic vs non-organic: the facts [referenced 26 November 2013]. Available at:

<http://www.soilassociation.org/LinkClick.aspx?fileticket=30Bk3Sg6Pp0%3D&tabid=1326>

The World of Organic Agriculture 2011. Statistics and Emerging Trends [referenced 19 November 2013]. Available at: <http://orgprints.org/19310/1/world-of-organic-agriculture-2011.pdf>

The World of Organic Agriculture 2013. Key Indicators and Summary [referenced 20 October 2013]. Available at: <http://www.organic-world.net/fileadmin/documents/yearbook/2013/web-fibl-ifoam-2013-25-34.pdf>

USDA 2012. Agriculture Marketing Service: National Organic Program [referenced 25 November 2013]. Available at <http://www.ams.usda.gov/AMSV1.0/ams.fetchTemplateData.do?template=TemplateC&navID=ConsumerlinkNOPStateOrganicPrograms&rightNav1=ConsumerlinkNOPStateOrganicPrograms&topNav=&leftNav=NationalOrganicProgram&page=NOPConsumers&resultType=&acct=nopgeninfo>

Whole Foods Market 2005. Nearly two-thirds of Americans have tried organic foods and beverages [referenced 16 November 2013]. Available at: <http://media.wholefoodsmarket.com/news/nearly-two-thirds-of-americans-have-tried-organic-foods-and-beverages>

Interview

Laaksonen, M. 2013. Managing Director. K-citymarket Oy Lahti Paavola. Interview 7 October 2013, 1 November 2013 and 27 November 2013.

APPENDICES

APPENDIX 1. The relationship between employment status and organic food purchasing.

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	12.114 ^a	3	.007
Likelihood Ratio	12.190	3	.007
Linear-by-Linear Association	7.374	1	.007
N of Valid Cases	613		

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 21.82

APPENDIX 2. The relationship between respondent age and organic food purchasing.

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	16.910 ^a	4	.002
Likelihood Ratio	17.018	4	.002
Linear-by-Linear Association	14.709	1	.000
N of Valid Cases	613		

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 33.23.

APPENDIX 3. The relationship between education level and organic food purchasing.

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	4.230 ^a	3	.238
Likelihood Ratio	4.241	3	.237
Linear-by-Linear Association	3.116	1	.078
N of Valid Cases	613		

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 23.31.

APPENDIX 4. The relationship between monthly income and organic food purchasing.

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	9.844 ^a	5	.080
Likelihood Ratio	10.036	5	.074
Linear-by-Linear Association	6.680	1	.010
N of Valid Cases	613		

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 9.42.

APPENDIX 5. The relationship between children in the household and organic food purchasing

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	3.822 ^a	1	.051
Likelihood Ratio	3.681	1	.055
Linear-by-Linear Association	3.816	1	.051
N of Valid Cases	613		

0 cells (0.0%) have expected count less than 5. The minimum expected count is 22.42

APPENDIX 6. Multiple regression to predict purchase frequency

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.430 ^a	.185	.179	.817

a. Predictors: (Constant), REGR factor score 4 for analysis 1, REGR factor score 3 for analysis 1, REGR factor score 2 for analysis 1, REGR factor score 1 for analysis 1

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	91,956	4	22,989	34,434	,000 ^b
	Residual	405,917	608	,668		
	Total	497,873	612			

a. Dependent Variable: Purchase frequency

b. Predictors: (Constant), REGR factor score 4 for analysis 1, REGR factor score 3 for analysis 1, REGR factor score 2 for analysis 1, REGR factor score 1 for analysis 1

APPENDIX 7. Survey questionnaire (Part of the paper version)

Question 1. How old are you?

1. ☐ < 20
2. ☐ 21-30
3. ☐ 31-40
4. ☐ 41-50
5. ☐ 51-60
6. ☐ 60 <

Question 2. What is your gender? 1. ☐ Male 2. ☐ Female

Question 3. Do you have children to support? 1. ☐ Yes 2. ☐ No

Question 4. What is the highest level of education you have completed?

1. ☐ Primary school
2. ☐ High school/ College
3. ☐ University/ Polytechnic
4. ☐ Post graduate

Question 9. To what extent do you agree or disagree with the following statements

	Strongly disagree			Strongly agree		
1. I think organic foods are better than conventional foods	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. I am willing to pay more for organic foods	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. The price of organic food is high	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. I trust in organic quality/advertisement	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. I will buy organic foods that many people buy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Organic foods are difficult to find	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Question 10. Where would be your preferable places to buy organic foods?

1. ☐ Supermarkets
2. ☐ Open markets (Buy from farmers)
3. ☐ Organic specialized stores

Question 12. Do you prefer Pirkka-organic food products ?

Not very preferably 1 2 3 4 5 Very preferably

Question 13. What kinds of organic food products you want to buy but you cannot find in K-citymarket ?

Question 14. Why do you buy organic foods infrequently or not at all (You can choose several reasons)

“I do not buy or buy organic foods infrequently because..”

1. ☐ I do not know much about it
2. ☐ I do not believe that organic foods are better than conventional foods
3. ☐ Organic foods are expensive
4. ☐ Organic foods deteriorate quickly
5. ☐ There are not many choices for organic foods
6. ☐ I distrust in organic quality


Other reasons:

Question 15. Would you like to get more information on organic foods from K-citymarket (via email, internet) ?

Not likely 1 2 3 4 5 Very likely

APPENDIX 8. Survey questionnaire (Part of the Finnish web-based version)

Page: 1 / 5

 **CITYMARKET**
LAHTI PAAVOLA

Luomutuotteita

1. Mikä nimesi on?

2. Kuinka vanha olet? *

☐ < 20
☐ 21-30
☐ 31-40
☐ 41-50
☐ 51-60
☐ 60 <

3. Mikä on sukupuolesi? *

☐ Mies
☐ Nainen

4. Onko sinulla lapsia? *

☐ Kyllä
☐ Ei

5. Mikä on koulutustasosi? *

☐ Peruskoulu
☐ Lukio/ Ammattikoulu
☐ Yliopisto/ Ammattikorkeakoulu
☐ Jatkotutkinto

6. Mikä on nykyinen työtilanteesi? *

☐ Työtön
☐ Yrittäjä/ Työssäkäyvä
☐ Opiskelija
☐ Eläkeläinen

7. Mitkä ovat kuukausitulosi? (Mukaan lukien mahdolliset tuet) *

☐ < 500 €
☐ 501-1500
☐ 1501-2500
☐ 2501-3500
☐ 3501-4500
☐ 4500 <

8. Kuinka usein ostat luomutuotteita? *

☐ En koskaan
☐ Harvoin/ pari kertaa vuodessa
☐ Joskus/ joka 2-3 viikko
☐ Usein / joka viikko
☐ Todella usein/ monta kertaa viikossa

Seuraavat kysymykset ovat monivalintoja, joissa on 5 eri vaihtoehtoa. Valitse niistä yksi, mikä sinun mielestäsi sopii parhaiten sinulle. Valitse vain yksi annetuista numeroista.

6. Mikä on nykyinen työtilanteesi ? *

- ☐ Työtön
☐ Yrittäjä/ Työssäkäyvä
☐ Opiskelija
☐ Eläkeläinen

7. Mitkä ovat kuukausitulosi? (Mukaan lukien mahdolliset tuet) *

- ☐ < 500 €
☐ 501-1500
☐ 1501-2500
☐ 2501-3500
☐ 3501-4500
☐ 4500 <

8. Kuinka usein ostat luomutuotteita? *

- ☐ En koskaan
☐ Harvoin/ pari kertaa vuodessa
☐ Joskus/ joka 2-3 viikko
☐ Usein / joka viikko
☐ Todella usein/ monta kertaa viikossa

Seuraavat kysymykset ovat monivalintoja, joissa on 5 eri vaihtoehtoa. Valitse niistä yksi, mikä sinun mielestäsi sopii parhaiten sinulle. Valitse vain yksi annetuista numeroista.

9. Kuinka tärkeitä seuraavat ominaisuudet ovat mielestäsi luomutuotteille, joita (mahdollisesti) ostat? " Minulle ostamani luomutuotteiden pitäisi..." *

	Ei tärkeä	Vähän tärkeä	Melko tärkeä	Tärkeä	Todella tärkeä
1. maistua hyvältä	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. olla hyvä rakenteeltaan	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. näyttää tuoreelta	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. olla terveellisiä	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5. sisältää paljon vitamiineja	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6. olla samaa mitä yleensä syön	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7. olla tuttuja minulle	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8. olla nopeita valmistaa	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9. olla luomutuote mitä perheeni/ ystäväni yleensä ostavat	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10. olla sopivan hintaisia	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Seuraava -->

20% valmiina



CITYMARKET

LAHTI PAAVOLA



Luomutuotteita

Seuraavat kysymykset ovat monivalintoja, joissa on 5 eri vaihtoehtoa. Valitse niistä yksi, mikä sinun mielestäsi sopii parhaiten sinulle. Valitse vain yksi annetuista numeroista.

10. Kuinka tärkeitä seuraavat ominaisuudet ovat mielestäsi luomutuotteille, joita (mahdollisesti) ostat? " Minulle ostamani luomutuotteiden pitäisi..." *

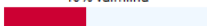
	Ei tärkeä	Vähän tärkeä	Melko tärkeä	Tärkeä	Todella tärkeä
11. olla rahanarvoisia	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
12. olla valmistettu ympäristöystävällisellä tavalla	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
13. olla valmistettu paikallisesti / lähialueilla	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
14. olla helppo löytää ruokakaupasta/supermarketista	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
15. olla hienon näköisessä pakkauksessa	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
16. niissä pitäisi olla luotettava luomuleima	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
17. olla tuotu maista, jotka tunnen	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

11. Oletko samaa – eri mieltä? *

	Vahvasti eri mieltä	Eri mieltä	Ei mielihpidettä	Samaa mieltä	Vahvasti samaa mieltä
18. Minun mielestäni luomutuotteet ovat laadukkaampia kuin tavanomaiset tuotteet	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
19. Olen valmis/halukas maksamaan enemmän luomutuotteista	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
20. Luomutuotteiden hinnat ovat korkeat	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
21. Luotan luomutuotteiden laatuun/mainontaan	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
22. Ostan luomutuotteita, joita muutkin ostavat	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
23. Luomutuotteita on vaikea löytää	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

<-- Edellinen Seuraava -->

40% valmiina



APPENDIX 9. List of interview questions.

1. Why does K-citymarket aim to increase the sales of organic food products? In that case, do you think that other products could become less purchased when organic foods are favorable?
2. What are the most purchased organic food products?
3. What are K-citymarket target customers?
4. How do K-citymarket customers differentiate organic food products from others?
5. What are K-citymarket requirements for the study results?